California Department of Health Services

Medi-Cal Managed Care Plans

Results of the HEDIS® 2001 Performance Measures for Medi-Cal Managed Care Members

Review Period
January to December 2000

September 2002

Gray Davis, Governor
State of California

Grantland Johnson, Secretary
California Health and Human Services Agency

Diana M. Bontá, R.N., Dr.P.H., Director
California Department of Health Services

California Department of Health Services

HEALTH SERVICES ADVISORY GROUP INC.

Table of Contents

Executive Summary

Since 1999, the California Department of Health Services (DHS) has required all contracted Medi-Cal managed care plans in operation for at least one year to report annually on performance measures in accordance with the Health Plan Employer Data and Information Set (HEDIS®) technical specifications. HEDIS is the most widely used set of performance measures in the managed care industry and was developed and is maintained by the National Committee for Quality Assurance (NCQA).

This HEDIS 2001 report is a summarization of 31 health plan contract-specific reports, representing 23 managed care plans, operating in 21 counties and covering over 2.5 million Medi-Cal managed care members.[1]

Key Findings

- **In 2001, Medi-Cal managed care plans demonstrated improved performance over 2000.**

The DHS External Accountability Set is a subset of HEDIS measures selected by California DHS, the Medi-Cal managed care health plans and Health Services Advisory Group, Inc. (HSAG) for measuring health plan performance.

With few exceptions, Medi-Cal managed care plans registered improvement in the provision of services composing the DHS External Accountability Set. This improvement was evident for the health plans both individually and collectively and, in many instances, the improvement was substantial. California Medi-Cal managed care plans outperformed the NCQA 2000 national Medicaid average on six of the nine performance measures. Aggregate results are shown in Table 1 on page 2.

The 2001 performance rates for the Medi-Cal managed care plans showed improvement over the 2000 rates on four measures: *Childhood Immunization Status Combination 1, Childhood Immunization Status Combination 2, Well-Child Visits in the First 15 Months of Life*, and *Eye Exams for People with Diabetes*. Performance on two of the measures—*Well-Child Visits in the Third, Fourth, Fifth and Sixth Year of Life* and *Postpartum Care*—remained essentially unchanged. *Use of Appropriate Medications for People with Asthma* was a new measure for 2001.

[1] For the purposes of this report, each of the 31 health plan contract-specific areas (representing 23 Medi-Cal managed care plans in 21 counties) was treated as an individual health plan. For example, Kaiser Foundation Health Plan, Inc. (Kaiser) has two contract-specific areas (i.e., Sacramento and San Diego). Results were reported separately for these areas as Kaiser GMC-North and Kaiser GMC-South.

Table 1. Aggregate HEDIS Results (1999 – 2001)

DHS External Accountability Set	Medi-Cal Managed Care Averages (%)			Medi-Cal Managed Care Weighted Averages** (%)		NCQA 2000 National Medicaid Average (%)
	1999	2000	2001	2000	2001	
Childhood Immunization Status Combination 1 (4:3:1:2:3 Series)	50.0	53.8	57.0	52.3	55.6	51.2
Childhood Immunization Status Combination 2 (4:3:1:2:3:1 Series)	32.5	44.3	51.5	44.3	50.5	38.0
Well-Child Visits in the First 15 Months of Life (Six or More Visits)	26.0	32.9	37.6	30.2	38.5	30.2
Well-Child Visits in the Third, Fourth, Fifth and Sixth Year of Life	51.7	56.7	56.4	50.8	54.2	49.0
Adolescent Well-Care Visits	21.2	29.9	26.9	26.7	25.8	28.0
Timeliness of Prenatal Care*	NA	NA	69.1	NA	66.3	NA
Postpartum Care	46.2	46.5	46.8	46.7	46.6	48.0
Use of Appropriate Medications for People with Asthma (Combined Rate)*	NA	NA	54.5	NA	NA	50.4
Eye Exams for People With Diabetes	41.3	53.1	58.1	52.2	54.0	41.0

**Timeliness of Prenatal Care* was a new measure for 2001; the NCQA 2000 national Medicaid average and the Medi-Cal managed care averages for 1999 and 2000 were not available. The Medi-Cal managed care plans reported on *Use of Appropriate Medications for People with Asthma* for the first time in 2001, and therefore, the Medi-Cal managed care averages for 1999 and 2000 were not available.
** Weighted averages were calculated using each plan's eligible population. Since the results for *Use of Appropriate Medications for People with Asthma* were based on the entire eligible population, rather than a sample, weighted averages do not apply.

- **Mature managed care plans had higher rates.**

Managed care plan performance was found to be closely associated with years in operation, as shown below in Table 2. The health plans in operation for more than five years had the highest aggregate HEDIS 2001 rates. The performance differences among the three health plan age groups listed in the table were highly significant statistically (p-value < 0.0001). This suggests that health plans in operation longer may have improved reporting capabilities, better information technology systems, and/or a more stable member population for whom they can provide care.

Table 2. Relationship Between Performance and Average Years in Operation of Managed Care Plan

Years in Operation	Number of Plans*	2001 Performance (%)
> 5 years	7	64.1
3-4 years	14	56.6
< 3 years	9	48.0

*Molina Medical Centers GMC-North began operating January 1, 2000 and is therefore not included in this table.

- **For the majority of the Medi-Cal managed care plans, 2001 performance rates improved over those for 2000.**

Twenty-three of the 25 reporting Medi-Cal managed care contract areas showed performance improvement in 2001 over 2000 (five Medi-Cal managed care plans had no comparable 2000 data and one health plan, Molina Medical Centers GMC-North, had no 2001 data).[1]

In 2001, DHS established a Minimum Performance Level (MPL) and a High Performance Level (HPL) for each of the measures in the DHS External Accountability Set. The MPLs and HPLs for each performance measure were defined as the NCQA 2000 national Medicaid 25th and 90th percentiles, respectively. The Medi-Cal managed care plans were expected to perform at or above the MPL, with the goal of ultimately performing at or above the HPL for each measure.

- **County Organized Health Systems (COHS) continued to improve their rates of Eye Exams for People with Diabetes.**

Since 1999, the five COHS have placed greater emphasis on diabetic care and their overall performance in providing eye examinations for diabetic members has shown steady improvement since that time. Their aggregate performance rate of 58.1 percent for this measure in 2001 exceeded the NCQA 2000 national Medicaid average.

- **The Medi-Cal managed care plans' performance in asthma care exceeded the national Medicaid average.**

While the *Use of Appropriate Medications for People with Asthma* was a new performance measure for all Medi-Cal managed care plans, the overall rate of 54.5 percent exceeded the NCQA 2000 national Medicaid average of 50.4 percent. The COHS had an overall combined rate of 64.0 percent, which was less than one percentage point below the NCQA 2000 national Medicaid 90th percentile (64.9 percent).

- **The areas of preventive care for adolescents and postpartum care need improvement.**

Nationally, the *Adolescent Well-Care Visits* measure had low rates across all populations (i.e., Medicaid and commercial). The 2001 aggregate HEDIS rates for Medi-Cal managed care plans for the *Adolescent Well-Care Visits* and *Postpartum Care* measures were slightly below the NCQA 2000 national Medicaid average.

- **The results illustrate the impact of intervention and focused quality improvement efforts.**

Several plans had higher rates for some measures, lower rates for others. These differences may reflect a plan's strategy for improvement. For example, a plan may have focused its efforts on improving the rates for childhood immunizations and well-child visits and concentrated less on the two maternity-related measures (i.e., *Timeliness of Prenatal Care* and *Postpartum Care*). Consequently, the rates for childhood immunizations and well-child visits may have increased,

while the rates for the maternity-related measures may have declined. Other factors affecting the rates may include changes in data collection capabilities, medical record documentation, encounter data completeness or an actual increase or decrease in the services provided.

The results from the HEDIS 2001 reporting year indicate health plan performance has steadily improved. It is expected that the HEDIS rates will continue to improve as health plans gain experience and as targeted interventions, such as provider education and incentives, become fully effective. Working collaboratively on quality improvement efforts, DHS and the plans can positively impact the health outcomes of the Medi-Cal managed care members.

Overview

Background and Purpose

Since 1999, DHS has required all contracted Medi-Cal managed care plans in operation for at least one year to report annually on performance measures in accordance with the current HEDIS technical specifications. HSAG, the External Quality Review Organization (EQRO) for DHS, was contracted to perform NCQA audits of the Medi-Cal managed care plans to ensure compliance with the technical specifications and to assure reliability of the results. These NCQA HEDIS Compliance Audits™ were conducted using a standardized methodology defined by NCQA.

The HEDIS 2001 report is the third annual assessment of managed care plan performance. This report is a summarization of 31 health plan contract-specific reports, representing 23 managed care plans, which serve over 2.5 million Medi-Cal managed care members in 21 counties.[1]

The purposes of this report are:

- To present a summary of the managed care plans' performance on the 2001 DHS External Accountability Set in comparison to the results of 1999 and 2000;
- To compare individual health plan performance against established HPLs and MPLs;
- To provide recommendations to the health plans that can be used to improve the services provided to managed care members and, thereby, increase rates for the DHS External Accountability Set.

In 1999, DHS and the health plans began to implement quality improvement interventions in an ongoing effort to improve the services provided to Medi-Cal managed care members. Included among these interventions were:

- Selecting the DHS External Accountability Set and establishing minimum performance levels to focus health plan efforts in specific areas of care;
- Establishing an ongoing Quality Improvement Work Group and an Encounter Data Work Group to foster collaborative action between the managed care plans and DHS;
- Implementing provider incentive programs within some health plans to encourage submission of encounter data from providers and the provision of preventive care;
- Implementing member incentive programs, such as gift certificates to members who completed an adolescent well-care visit;

NCQA HEDIS Compliance Audit™ is a trademark of NCQA.

- Establishing NCQA accreditation for their Medicaid product line as an organizational goal for several health plans;

- Improving the ability of health plans to retrieve medical records; and

- Improving and integrating administrative databases, which increase the health plans' ability to capture vital information for quality improvement.

DHS External Accountability Set

The performance measures assessed for this report, referred to as the DHS External Accountability Set, were selected by DHS with significant input from the contracted health plans and HSAG. Most of the HEDIS measures in the 2001 DHS External Accountability Set were the same as those used in previous years. However, NCQA combined *Prenatal Care in the First Trimester*, *Initiation of Prenatal Care,* and *Check-ups After Delivery* into a single measure, *Prenatal and Postpartum Care.* In addition, the 2001 DHS External Accountability Set included a new HEDIS measure, *Use of Appropriate Medications for People with Asthma*.

The DHS External Accountability Set included HEDIS measures from three different HEDIS domains, which reflect different aspects of health plan performance:

- The Effectiveness of Care domain evaluates the impact of health care delivered to specific populations and provides information about the clinical quality of that care.

- The Access/Availability of Care domain assesses whether or not care was available to members when needed and whether that care was provided in a timely manner.

- The Use of Services domain measures which services the health plan was providing to each member and what percentage of members were receiving the recommended services.

The measures for the 2001 DHS External Accountability Set are presented in Table 3 on page 7.

Table 3. Audited 2001 HEDIS Measures

HEDIS Domain	DHS External Accountability Set	NCQA Data Reporting Method
Effectiveness of Care	Childhood Immunization Status	Administrative or Hybrid
	Use of Appropriate Medications for People with Asthma	Administrative
	Eye Exams for People with Diabetes*	Administrative or Hybrid
Access / Availability of Care	Prenatal and Postpartum Care	Administrative or Hybrid
Use of Services	Well-Child Visits in the First 15 Months of Life	Administrative or Hybrid
	Well-Child Visits in the Third, Fourth, Fifth and Sixth Year of Life*	Administrative or Hybrid
	Adolescent Well-Care Visits	Administrative or Hybrid

* *Eye Exams for People with Diabetes*, the third numerator of the *Comprehensive Diabetes Care* measure, was reported by the five County Organized Health Systems (COHS) as a substitute for the *Well-Child Visits in the Third, Fourth, Fifth and Sixth Year of Life* measure. This approach was taken due to the fact that there is a significant difference in the average age of the COHS population compared to that of all other health plans, and this measure would better reflect the large number of managed care members with chronic illness in the population served by these five health plans. Please see the Managed Care Model Types section in Appendix F for more information about COHS and other managed care model types.

The last column of Table 3, labeled *NCQA Data Reporting Method*, identifies how each measure was collected and reported. Health plans chose to use the administrative method or the hybrid method for most measures, except for *Use of Appropriate Medications for People with Asthma*. This measure required administrative data only and could not be calculated using the hybrid method. A complete description of the administrative and hybrid methods can be found in Appendix D and in the methodology section of Appendix A.

Audit Measure Designations

During the audit process, each health plan received an audit measure designation for each of the HEDIS measures in the DHS External Accountability Set. The audit measure designations, based on the rationales defined by NCQA, are presented below in Table 4.

Table 4. Audit Measure Designations

Audit Measure Designation	Notation	Rationales
Report	R	1. The health plan followed the specifications and produced a reportable rate for the measure. 2. The health plan followed the specifications for producing a reportable denominator, but the denominator was too small (i.e., less than 30 cases) to report a valid rate, resulting in a Not Applicable (NA) designation.
Not Report	NR	1. The health plan calculated the measure, but the rate was materially biased. 2. The health plan did not calculate the measure even though a population existed for which the measure could have been calculated. 3. The health plan calculated the measure, but chose not to report the rate.

Individual HEDIS measures may have been calculated correctly, but may still have had fewer than 30 cases in the denominator. In these cases, the rate for the measure would be "NA," but the audit measure designation would be "R."

Audit measure designations of "NR" represented issues with a health plan that would not allow for comparison with other plans' rates for that measure. Identified issues included both those that may be easy to correct (e.g., computer programming errors) and those that reflect more serious problems requiring additional commitment of health plan resources. Health plans that received an "NR" were not included in the calculation of the overall Medi-Cal managed care averages for a given measure.

Interpreting the Medi-Cal Managed Care Plan Results

This report is structured in a similar format for each measure, beginning with a discussion of the importance of the HEDIS measure to the Medi-Cal managed care population and ending with a review of the trends and an explanation of quality improvement efforts implemented for that measure. A brief description of the HEDIS measures can be found in Appendix B.

Table 5 (below) provides a reference for the abbreviated plan names used in this report. An explanation of the analytic tools in this report follows the table, on page 10.

Table 5. Reference for Abbreviated Plan Names

Contract-Specific Areas for Medi-Cal Managed Care Plans		Abbreviated Plan Name Used in This Report
1	Alameda Alliance for Health	Alameda Alliance for Health
2	Blue Cross of California	Blue Cross of California (CP)
3	Blue Cross of California (Sacramento)	Blue Cross of California (GMC-North)
4	Blue Cross of California (San Diego)	Blue Cross of California (GMC-South)
5	Blue Cross of California (Stanislaus)	Blue Cross of California (Stanislaus)
6	Blue Cross of California (Tulare)	Blue Cross of California (Tulare)
7	CalOptima	CalOptima
8	Central Coast Alliance for Health	Central Coast Alliance for Health
9	Community Health Group	Community Health Group
10	Contra Costa Health Plan	Contra Costa Health Plan
11	Health Net	Health Net (CP)
12	Health Net (San Diego)	Health Net (GMC-South)
13	Health Net (Sacramento)	Health Net (GMC-North)
14	Health Plan of San Joaquin	Health Plan of San Joaquin
15	Health Plan of San Mateo	Health Plan of San Mateo
16	Inland Empire Health Plan	Inland Empire Health Plan
17	Kaiser Foundation Health Plan, Inc. (Sacramento)	Kaiser (GMC-North)
18	Kaiser Foundation Health Plan, Inc. (San Diego)	Kaiser (GMC-South)
19	Kern Family Health Care	Kern Family Health Care
20	L.A. Care Health Plan	L.A. Care Health Plan
21	Maxicare	Maxicare
22	Molina Medical Centers	Molina Medical Centers
23	Molina Medical Centers (Sacramento)	Molina Medical Centers (GMC-North)
24	Partnership Health Plan of California	Partnership Health Plan
25	San Francisco Health Plan	San Francisco Health Plan
26	Santa Barbara Regional Health Authority	Santa Barbara Regional Health Authority
27	Santa Clara Family Health Plan	Santa Clara Family Health Plan
28	Sharp Health Plan	Sharp Health Plan
29	University of California, San Diego Health Plan	UCSD Health Plan
30	Universal Care	Universal Care
31	Western Health Advantage	Western Health Advantage

Graphs and Tables

The graphs in each section display the results for each Medi-Cal managed care plan, the confidence interval associated with the plan's rate, the sample size, and the performance level (above or below the NCQA 2000 national Medicaid 90th or 25th percentiles, respectively). These graphs also include the NCQA 2000 national Medicaid average, the 2001 Medi-Cal managed care average and the 2001 Medi-Cal managed care weighted average.

The tables following the graphs show the trend from 1999 to 2001 for each Medi-Cal managed care plan. The Medi-Cal managed care plans reported on the HEDIS measure, *Use of Appropriate Medications for People with Asthma* for the first time in 2001. Therefore, the rates for 1999 and 2000 for this measure were not available. In addition, *Timeliness of Prenatal Care* was a new HEDIS 2001 measure that combined *Initiation of Prenatal Care* and *Prenatal Care in the First Trimester* (from HEDIS 1999 and 2000) into one rate. Consequently, the rates for 1999 and 2000 were not comparable for *Timeliness of Prenatal Care*. The *Postpartum Care* measure also had a minor change in the HEDIS 2001 Technical Specifications, but the change caused only minimal impact on the rates.

HSAG contacted each of the Medi-Cal managed care plans that showed either a substantial increase or decrease in rates between 2000 and 2001 to discuss and document the quality improvement efforts that had been made by each of the managed care plans that showed improvement. The responses from these plans have been displayed in Table 29 in Appendix E. When a plan's rate significantly decreased, or the plan's rate was below the MPL, HSAG asked the plan to identify any known factors that contributed to its performance. The reasons given by the individual health plans have been provided in the text of this report.

Medi-Cal Managed Care Average and Medi-Cal Managed Care Weighted Average

The HEDIS rates are presented by managed care plan, beginning on page 13. Both raw and weighted averages have been computed for the overall Medi-Cal managed care averages. The overall Medi-Cal managed care average was calculated by adding the numerators for each of the managed care plans and dividing by the total denominators across all plans.

For hybrid measures, managed care plans with more than 476 sample cases in the denominator (i.e., health plans that used the administrative method for hybrid measures) were adjusted to 432 in the calculation of the Medi-Cal managed care average. This was necessary in order to obtain an overall rate comparable to the NCQA 2000 national Medicaid average. NCQA does not take into account varying health plan population sizes when computing Medicaid averages. The Medi-Cal managed care weighted average was calculated to account for the various eligible population sizes of the plans and provides a more accurate rate for the overall Medi-Cal managed care program.

NCQA 2000 National Medicaid Average

The NCQA 2000 national Medicaid average has been displayed in certain graphs and tables to allow for meaningful comparisons of results by managed care plan. The NCQA 2000 national

averages for Medicaid HEDIS measures were calculated using data from the 1999 measurement year. The NCQA 2001 national Medicaid averages were not yet available at the time this report was prepared.

Minimum and High Performance Levels

In addition to the NCQA 2000 national Medicaid averages, MPLs and HPLs have been provided in selected tables. DHS established the MPLs and HPLs in collaboration with HSAG and the managed care plans.

The purposes for setting MPLs and HPLs were:

- To identify plans that performed significantly better or worse than the Medi-Cal managed care plan average on any particular measure;
- To establish goals for continuous quality improvement among the Medi-Cal managed care plans;
- To allow DHS to recognize higher performing health plans; and
- To allow DHS to monitor and provide necessary assistance to lower performing health plans.

The MPLs have been defined as the NCQA 2000 national Medicaid 25th percentile for each measure, while the HPLs represent the NCQA 2000 national Medicaid 90th percentile. In the case of a new measure, when a benchmark has not yet been established, the MPL equals the Medi-Cal managed care average minus one standard deviation, and the HPL equals the Medi-Cal managed care average plus one standard deviation. The MPLs and HPLs are discussed in further detail in the Performance Summary section beginning on page 49.

Confidence Intervals

When comparing health plans, confidence intervals were used (confidence intervals are indicated by the blue lines in the tables on pages 17, 19, 23, 27, 31, 35, and 38) to help determine if there were statistically significant differences in the rates. Confidence intervals that do not overlap are statistically significant. For example, on page 17 in Table 6 for *Childhood Immunization Status Combination 1*, the confidence intervals between Santa Barbara Regional Health Authority and CalOptima do not overlap, indicating that the rate for Santa Barbara Regional Health Authority (73.6 percent) was truly higher than CalOptima's rate (62.0 percent).

When confidence intervals overlap and include the rate for another health plan, the two rates were not statistically different. An example of this can be seen in Table 10 on page 23. Kaiser GMC-North had a rate of 66.7 percent, while San Francisco Health Plan had a rate of 64.2 percent. However, the confidence interval for each of the two health plans stretches beyond the mid-point of the confidence interval for the other health plan, indicating that the rates for these two health plans were not statistically different. Confidence intervals that only slightly overlap

may or may not be statistically significant and require additional statistical tests to determine significance.

Quality Improvement Efforts

In the Managed Care Plan Results section, quality improvement efforts for each measure are discussed for each Medi-Cal managed care plan that had a significant increase in their HEDIS rates from 2000 to 2001. Additionally, a summary of these activities has been provided in Appendix E.

Medi-Cal Managed Care Plan Results

Childhood Immunization Status

The Centers for Disease Control and Prevention (CDC) recommends immunizing children for ten preventable diseases.[2] Childhood immunization is a simple method for preventing serious, and potentially fatal illnesses such as polio, hepatitis, tetanus, and measles. Prevention of these and other diseases, along with their associated complications, may prevent lost school days for children and may reduce the number of work days missed for parents staying home with sick children. According to the *2000 NCQA State of Managed Care Report*, it is estimated that one million children in the United States do not receive the necessary vaccinations by age two.[3]

Both DHS and the health plans have an interest in the immunization status of children and have committed to improving rates of immunization in the Medi-Cal managed care population. The immunizations included in this measure are: diphtheria, tetanus, and pertussis (DTP); oral polio vaccine (OPV); measles, mumps, and rubella (MMR); Haemophilus influenza Type B (HIB); hepatitis B vaccine (HBV); and the varicella-zoster virus (VZV). Derivatives of the primary vaccines—such as inactivated poliovirus vaccine (IPV), diphtheria and tetanus toxoids, and acellular pertussis (DtaP)—are also acceptable and included in the results.

Because the health plans were required to follow the HEDIS 2001 criteria that assess the immunization status of children at 24 months of age, any antigens administered after 24 months of age were not included in the numerator. (Refer to Appendix B for a complete description of this measure.) HEDIS also restricts the timeframe for the doses of MMR, HIB, HBV, and VZV. Consequently, children who received their last doses of MMR, HIB, or VZV vaccines before 12 months of age were not included in the numerator. The time restriction for HBV was more liberal, requiring at least one dose to be administered after six months of age.

Results for Combined Childhood Immunization Rates

This report used the HEDIS 2001 Technical Specifications for the combined immunization rates (i.e., Combinations 1 and 2). The HEDIS Technical Specifications can be changed by NCQA as a result of different immunization schedules, new immunizations, or removal of outdated immunizations. In 1999, Combination 1 required only two doses of HBV by the second birthday (series 4:3:1:2:2), while Combination 2 required three doses of HBV (series 4:3:1:2:3). The HEDIS 2001 Combination 1 was the same as the 1999 Combination 2, and the HEDIS 2001 Combination 2 (series 4:3:1:2:3:1) was the same as the 1999 Combination 3. The combinations were the same between HEDIS 2000 and HEDIS 2001.

[2] "National Immunization Program web site," www.cdc.gov/nip/acip.
[3] National Committee for Quality Assurance, *NCQA's State of Managed Care Quality Report*, Washington, D.C., 2000, p. 33.

The combined *Childhood Immunization Status* rates can never be higher than the lowest single antigen rate. For example, if the immunization status for each antigen is above 75 percent except for DTP, which has a 70.7 percent immunization rate, the combined rate cannot be higher than 70.7 percent even if every child immunized for DTP received all the other immunizations. It is important to analyze single antigen rates, as these rates provide health plans with a specific target for future interventions. (For antigen-specific rates, see Appendix C.)

Combination 1 (Series 4:3:1:2:3)

Table 6 through Table 9, on pages 17 through 20, display the combined childhood immunization rates by health plan. The rates for Combination 1 (series 4:3:1:2:3) ranged from a low of 34.2 percent to a high of 73.6 percent. The 2001 Medi-Cal managed care average of 57.0 percent was exceeded by 50.0 percent (15 out of 30) of the health plans. Three health plans were above the NCQA 2000 national Medicaid 90th percentile, while UCSD Health Plan reported a rate below the 25th percentile.

UCSD Health Plan investigated its low childhood immunization rates and suspected that the administrative data for immunizations was incomplete. For 2002, UCSD Health Plan will obtain the immunization data from the county registry, and this may improve its results. Additionally, the plan's HBV rate, which was 51.3 percent, may be one possible reason that the Combination 1 rate was low. This immunization requires three doses, the first of which is usually given in the hospital shortly after birth. UCSD Health Plan may not have received complete data from the hospital.

Trends

Table 7 on page 18 examines the trends from 1999 to 2001 for the 4:3:1:2:3 series. Childhood immunization rates for Combination 1 have consistently improved since 1999. Seventeen out of 30 (56.7 percent) of the Medi-Cal managed care plans improved their rates by more than five percentage points and eight plans improved by more than ten percentage points. The overall Medi-Cal managed care average improved seven percentage points from 50.0 percent in 1999 to 57.0 percent in 2001. Between 1999 and 2001, only Maxicare had a decline in its rate. At the time of this report, Maxicare no longer participated in the Medi-Cal managed care program.

For *Childhood Immunization Status Combination 1*, the gain in the percentage of children fully immunized in the sample size in 2001 versus 2000 was 3.2 percent (57.0 percent in 2001 to 53.8 percent in 2000). The total number of children from all health plans eligible for inclusion in this HEDIS measure was 68,473. When applied to this population, the gain of 3.2 percentage points implies that, in 2001, 2,191 *more children* enrolled in Medi-Cal managed care plans were immunized than in 2000.

Combination 2 (Series 4:3:1:2:3:1)

The improvement in the rates between 2000 and 2001 for *Childhood Immunization Status Combination 2* was 7.2 percent. The improvement was directly attributed to the increase in the use of VZV. Since 2000, this positive trend in the Medi-Cal managed care program has shown that even relatively new immunizations can quickly become widely used and accepted.

The rates for Combination 2 ranged from 32.0 percent for UCSD Health Plan to 66.8 percent for Kaiser GMC-North. With the exception of UCSD Health Plan, every Medi-Cal managed care plan was above the NCQA 2000 national Medicaid average of 38.0 percent. All of the plans were above the MPL of 27.6 percent, while 9 out of 30 health plans (30.0 percent) reported rates above the 2001 HPL of 55.9 percent.

Trends

Combination 2 first became a numerator for the HEDIS *Childhood Immunization Status* in 1999. NCQA does not publicly report new measures the first year to allow time for any corrections to be made to the technical specifications and to encourage health plans to report the new measure. Therefore, the table showing the trends for this measure (Table 9 on page 20) only displays results from 2000 and 2001.

Health Net GMC-North, Kaiser GMC-South and Health Net (CP) had statistically significant (p-value < 0.05) declines in performance for this measure between 2000 and 2001. Health Net attributed its decline to organizational changes, including use of a new vendor in the collection and reporting of their HEDIS rates. At the time of this report, Kaiser GMC-South was still investigating the reason for the decline in its rate. Kaiser GMC-South had implemented data capture changes on its provider forms, believing this to have been a contributing factor.

The increase in the Combination 2 rate implies that 5,135 more of the 68,473 eligible children received Combination 2 in 2001 than in 2000.

Quality Improvement Efforts

Ten Medi-Cal managed care plans had substantial increases in their 2001 HEDIS rate compared to 2000. A summary of the strategies these Medi-Cal managed care plans used in 2000 to improve rates is presented below:

- Welcome calls were conducted to every household and subscribers were assisted, when needed, with obtaining appointments for their children to see a primary care practitioner.
- Postcard reminders were sent to parents of children at 12 months and 18 months of age.
- Gift certificates were issued to parents for children who received all their immunizations.
- Staff resources were increased for collecting and reporting HEDIS data.

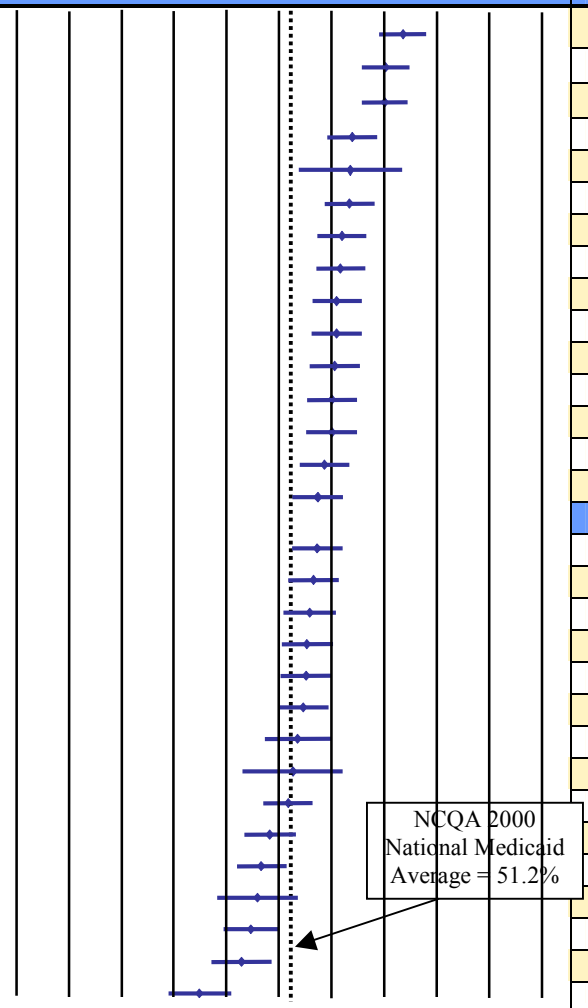
- Pursuit of medical records was intensified and immunization registry data was obtained.
- Provider awareness and education about recommended childhood immunizations and the importance of HEDIS reporting was increased. Every two months, providers were sent lists of those children needing immunizations.
- Processes for collecting encounter data were improved, including providing financial incentives to providers.

Please see Table 29 in Appendix E for specific information for the individual Medi-Cal managed care plans.

Table 6. Childhood Immunization Status Combination 1 (Series 4:3:1:2:3)

Description: The percentage of Medicaid enrolled members who turned two years old during the 12-month study period, who were continuously enrolled in the health plan for 12 months immediately preceding their second birthday (with no more than a one-month gap in coverage), and who received the following immunizations by their second birthday: 4 doses of DTP, 3 doses of OPV, 1 dose of MMR, 2 doses of HIB, and 3 doses of HBV.

Medi-Cal Managed Care Plan	95% Confidence Intervals	Sample Size	Rate (%)	HPL/ MPL
Santa Barbara Regional Health Authority		402	73.6	▲
Contra Costa Health Plan		411	70.3	▲
Kaiser (GMC-North)		437	70.3	▲
Central Coast Alliance for Health		411	64.0	
Kaiser (GMC-South)		102	63.7	
Blue Cross of California (CP)		430	63.5	
CalOptima		432	62.0	
Blue Cross of California (GMC-North)		432	61.8	
Blue Cross of California (Stanislaus)		432	61.1	
Santa Clara Family Health Plan		431	61.0	
Kern Family Health Care		432	60.6	
Health Plan of San Mateo		429	60.1	
Community Health Group		411	60.1	
Partnership Health Plan of California		432	58.8	
San Francisco Health Plan		430	57.4	
2001 Medi-Cal Managed Care Average			**57.0**	
Health Net (GMC-North)		428	56.3	
Alameda Alliance for Health		432	55.6	
L.A. Care Health Care		414	54.8	
Blue Cross of California (Tulare)		432	54.4	
Inland Empire Health Plan		432	54.2	
Molina Medical Centers		453	53.6	
Universal Care		264	52.7	
Health Net (GMC-South)		118	51.7	
Health Plan of San Joaquin		453	50.8	
Health Net (CP)		431	47.3	
Sharp Health Plan		452	45.8	
Blue Cross of California (GMC-South)		180	45.0	
Western Health Advantage		383	43.9	
Maxicare		307	42.0	
UCSD Health Plan		269	34.2	▼
	0 10 20 30 40 50 60 70 80 90 100			
Molina Medical Centers (GMC-North)		0	NA	



2001 Medi-Cal Managed Care Weighted Average **55.6%**

▲ This rate was above the HPL (i.e., the NCQA national Medicaid 90th percentile of 69.3 percent).
▼ This rate was below the MPL (i.e., the NCQA national Medicaid 25th percentile of 41.8 percent).

Table 7. Trends in the HEDIS Rates for Childhood Immunization Status Combination 1 (Series 4:3:1:2:3)

Medi-Cal Managed Care Plan	HEDIS Rates (%)			Trend 1999-2001
	1999*	2000	2001	
Santa Barbara Regional Health Authority	68.8	75.1	73.6	↔
Contra Costa Health Plan	58.9	62.3	70.3	↑
Kaiser (GMC-North)	NR	58.9	70.3	↑
Central Coast Alliance for Health	38.7	56.5	64.0	↑
Kaiser (GMC-South)	NA	66.7	63.7	↔
Blue Cross of California (CP)	56.4	65.4	63.5	↑
CalOptima	52.6	57.9	62.0	↑
Blue Cross of California (GMC-North)	58.5	62.2	61.8	↔
Blue Cross of California (Stanislaus)	55.6	57.4	61.1	↑
Santa Clara Family Health Plan	46.7	52.1	61.0	↑
Kern Family Health Care	55.9	54.9	60.6	↔
Community Health Group	NA	54.0	60.1	↑
Health Plan of San Mateo	51.9	61.7	60.1	↑
Partnership Health Plan of California	59.8	49.5	58.8	↔
San Francisco Health Plan	50.8	55.6	57.4	↑
Medi-Cal Managed Care Average	**50.0**	**53.8**	**57.0**	↑
Health Net (GMC-North)	38.5	63.3	56.3	↑
Alameda Alliance for Health	45.7	57.2	55.6	↑
L.A. Care Health Plan	42.2	46.4	54.8	↑
Blue Cross of California (Tulare)	NA	NA	54.4	NA
Inland Empire Health Plan	55.7	51.9	54.2	↔
Molina Medical Centers	39.9	39.7	53.6	↑
Universal Care	NA	47.9	52.7	↔
Health Net (GMC-South)	NA	NA	51.7	NA
NCQA 2000 National Medicaid Average: 51.2%				
Health Plan of San Joaquin	45.8	41.0	50.8	↑
Health Net (CP)	44.2	53.6	47.3	↔
Sharp Health Plan	NA	27.6	45.8	↑
Blue Cross of California (GMC-South)	NA	NA	45.0	NA
Western Health Advantage	35.8	39.8	43.9	↑
Maxicare	53.6	37.8	42.0	↓
UCSD Health Plan	NA	NA	34.2	NA
Molina Medical Centers (GMC-North)	NA	NA	NA	NA

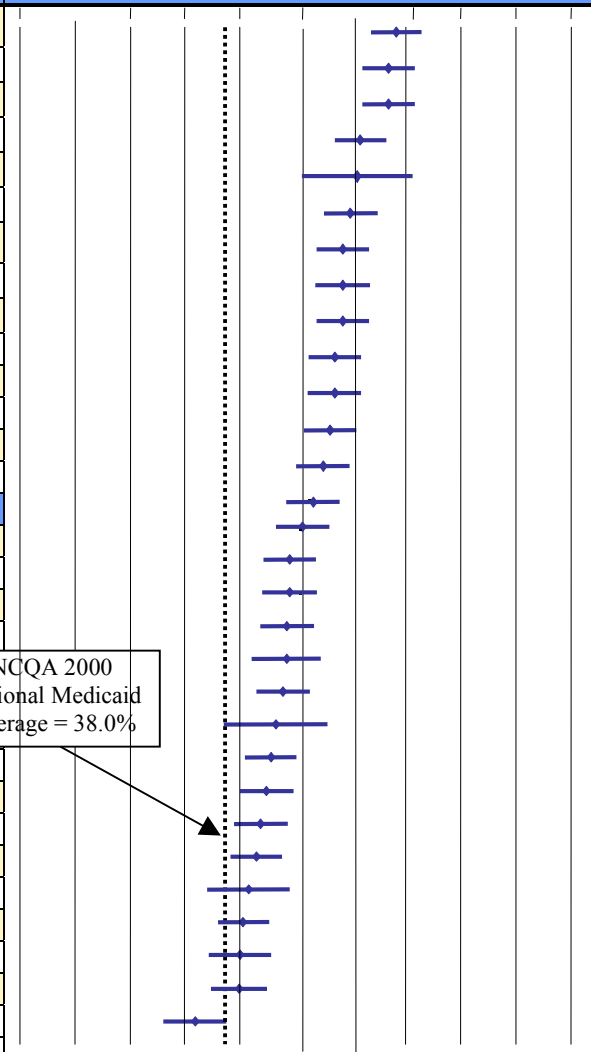
*In 1999, this combination was referred to as Combination 2.

↑ Indicates the rate for the health plan increased at least five percentage points.
↔ Indicates the rate for the health plan increased or decreased by less than five percentage points.
↓ Indicates the rate for the health plan decreased at least five percentage points.

Table 8. Childhood Immunization Status Combination 2 (Series 4:3:1:2:3:1)

Description: The percentage of Medicaid enrolled members who turned two years old during the 12-month study period, who were continuously enrolled in the health plan for 12 months immediately preceding their second birthday (with no more than a one-month gap in coverage), and who received the following immunizations by their second birthday: 4 doses of DTP, 3 doses of OPV, 1 dose of MMR, 2 doses of HIB, 3 doses of HBV, and 1 dose of VZV.

Medi-Cal Managed Care Plan	95% Confidence Intervals	Sample Size	Rate (%)	HPL/ MPL
Kaiser (GMC-North)		437	66.8	▲
Contra Costa Health Plan		411	65.5	▲
Santa Barbara Regional Health Authority		402	65.4	▲
CalOptima		432	60.4	▲
Kaiser (GMC-South)		102	59.8	▲
Central Coast Alliance for Health		411	58.6	▲
Blue Cross of California (CP)		430	57.2	▲
Community Health Group		411	57.2	▲
Kern Family Health Care		432	57.2	▲
Blue Cross of California (GMC-North)		432	55.8	
Health Plan of San Mateo		429	55.7	
Partnership Health Plan of California		432	54.9	
Santa Clara Family Health Plan		431	53.6	
Health Net (GMC-North)		428	51.9	
2001 Medi-Cal Managed Care Average			**51.5**	
San Francisco Health Plan		430	51.4	
Blue Cross of California (Tulare)		432	49.1	
L.A. Care Health Plan		414	49.0	
Alameda Alliance for Health		432	48.6	
Universal Care		264	48.5	
Inland Empire Health Plan		432	47.9	
Health Net (GMC-South)		118	46.6	
Molina Medical Centers		453	45.7	
Blue Cross of California (Stanislaus)		432	44.9	
Health Net (CP)		431	43.9	
Health Plan of San Joaquin		453	43.0	
Blue Cross of California (GMC-South)		180	41.7	
Sharp Health Plan		452	40.7	
Maxicare		307	40.1	
Western Health Advantage		383	40.0	
UCSD Health Plan		269	32.0	
	0 10 20 30 40 50 60 70 80 90 100			
Molina Medical Centers (GMC-North)		0	NA	
2001 Medi-Cal Managed Care Weighted Average	**50.5%**			



▲ This rate was above the HPL (i.e., the NCQA national Medicaid 90th percentile of 55.9 percent).
▼ This rate was below the MPL (i.e., the NCQA national Medicaid 25th percentile of 27.6 percent).

Table 9. Trends in the HEDIS Rates for Childhood Immunization Status Combination 2 (Series 4:3:1:2:3:1)

Medi-Cal Managed Care Plan	HEDIS Rates (%)		Trend 2000-2001
	2000	2001	
Kaiser (GMC-North)	52.4	66.8	↑
Contra Costa Health Plan	51.8	65.5	↑
Santa Barbara Regional Health Authority	63.3	65.4	↔
CalOptima	52.3	60.4	↑
Kaiser (GMC-South)	66.0	59.8	↓
Central Coast Alliance for Health	43.8	58.6	↑
Blue Cross of California (CP)	52.7	57.2	↔
Community Health Group	49.6	57.2	↑
Kern Family Health Care	48.4	57.2	↑
Blue Cross of California (GMC-North)	52.2	55.8	↔
Health Plan of San Mateo	53.4	55.7	↔
Partnership Health Plan of California	44.2	54.9	↑
Santa Clara Family Health Plan	42.4	53.6	↑
Health Net (GMC-North)	55.9	51.9	↔
Medi-Cal Managed Care Average	**44.3**	**51.5**	↑
San Francisco Health Plan	47.2	51.4	↔
Blue Cross of California (Tulare)	NA	49.1	NA
L.A. Care Health Plan	38.7	49.0	↑
Alameda Alliance for Health	46.5	48.6	↔
Universal Care	36.2	48.5	↑
Inland Empire Health Plan	39.8	47.9	↑
Health Net (GMC-South)	NA	46.6	NA
Molina Medical Centers	31.1	45.7	↑
Blue Cross of California (Stanislaus)	23.8	44.9	↑
Health Net (CP)	48.5	43.9	↔
Health Plan of San Joaquin	29.9	43.0	↑
Blue Cross of California (GMC-South)	NA	41.7	NA
Sharp Health Plan	24.7	40.7	↑
Maxicare	27.6	40.1	↑
Western Health Advantage	32.4	40.0	↑
NCQA 2000 National Medicaid Average: 38.0%			
UCSD Health Plan	NA	32.0	NA
Molina Medical Centers (GMC-North)	NA	NA	NA

↑ Indicates the rate for the health plan increased at least five percentage points.
↔ Indicates the rate for the health plan increased or decreased by less than five percentage points.
↓ Indicates the rate for the health plan decreased at least five percentage points.

Well-Child Visits in the First 15 Months of Life (Six or More Visits)

The American Academy of Pediatrics (AAP) recommends six well-child visits in the first year of life.[4] These well-child visits provide opportunities for primary care providers to detect physical, developmental, behavioral, and emotional problems; provide early interventions and treatment; and make appropriate referrals to specialists. The AAP also recommends that clinicians use these visits to offer counseling and guidance to the parents.

Results

The NCQA 2000 national Medicaid average of 30.2 percent was exceeded by 68.2 percent (15 out of 22) of the reporting health plans. (See Table 10 and Table 11 on pages 23 and 24). The 2001 Medi-Cal managed care average was 37.6 percent, compared to 32.9 percent in 2000. Ten health plans (45.5 percent) were above the 2001 Medi-Cal managed care average and three plans were above the established HPL of 57.9 percent.

The MPL for this measure was 18.1 percent. Seven health plans were below this MPL for 2001, including the four managed care plans that received an NR audit measure designation. This was the second year that Sharp Health Plan received an NR for this measure. In 2000, the NR was due to an electronic error, while in 2001 the NR was a result of issues with the medical record pursuit. Maxicare and UCSD Health Plan received an NR due to computer programming errors and problems with identifying the denominator.

In 2001, CalOptima also received an NR for this measure due to an error in their computer programming logic. They did not have sufficient time to correct the programming and pursue medical records prior to the reporting deadline. The programming error was corrected and CalOptima is expected to be able to report this measure in 2002.

Trends

The Medi-Cal managed care rate increased from 26.0 percent in 1999 to 37.6 percent in 2001 (Table 11 on page 24). Six of the 22 plans (27.3 percent) with a reportable rate had improvements of more than 20 percentage points and another 3 of the 22 plans (13.6 percent) improved by more than 10 percentage points.

Partnership Health Plan and Santa Clara Family Health Plan both had a decline of more than five percentage points between 1999 and 2001. The rate for Santa Clara Family Health Plan was virtually identical in 2000 and 2001 (27.1 and 27.0 percent, respectively). The rate for Partnership Health Plan decreased in 2000 (from 52.0 percent in 1999 to 21.6 percent in 2000), but then improved by more than ten percentage points in 2001. This overall decline for Partnership Health Plan was directly attributed to using the administrative method to report on the rate in 2000 and 2001.

[4] "Recommendations for Preventive Pediatric Health Care (RE9939)," *American Academy of Pediatrics Policy Statement*, Vol.105: 3, March 2000, p. 645.

Although this measure improved by 4.7 percentage points in 2001 compared to 2000, the Medi-Cal managed care average was only 37.6 percent. This suggests that less than four out of every ten children were seen by a health plan provider six or more times in the first 15 months of life. The number of children eligible for this service was 9,051 and the 4.7 percent increase in the rate implies that 425 more children in this age group received six or more well-child visits in 2001 as compared to 2000.

Quality Improvement Efforts

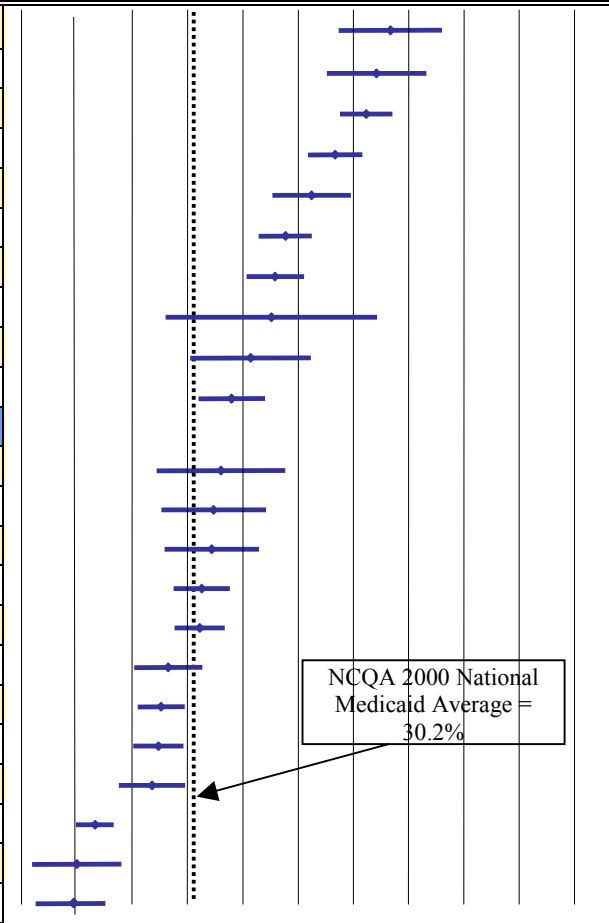
Blue Cross of California (Stanislaus), Central Coast Alliance for Health, Community Health Group, Contra Costa Health Plan, and Partnership Health Plan had substantial increases in their 2001 HEDIS rate compared to 2000. A summary of the strategies these five Medi-Cal managed care plans used in 2000 to improve rates is presented below:

- Increased provider awareness and education about recommended services and the importance of HEDIS reporting.
- Improved encounter data submission by providing incentives to providers.
- Published HEDIS 2000 rates in the newsletter to members and shared "Best Practices" with the participating providers.
- Sent mail to members to remind them of needed well-child visits.
- Increased the number of staff members who had previous training and experience with HEDIS data collection and medical record abstraction.
- Created a department with direct responsibility for oversight of the entire HEDIS reporting process.
- Applied past HEDIS experience to develop strategies for the enhancement of data collection capabilities and medical record pursuit.

Please see Table 29 in Appendix E for specific information for the individual Medi-Cal managed care plans.

Table 10. Well-Child Visits in the First 15 Months of Life (Six or More Visits)

Description: The percentage of Medicaid enrolled members who turned 15 months old during the 12-month study period, who were continuously enrolled in the health plan from 31 days of age (with no more than a one-month gap in coverage), and who received six or more well-child visits with a primary care practitioner during their first 15 months of life.

Medi-Cal Managed Care Plan	95% Confidence Intervals	Sample Size	Rate (%)	HPL/ MPL
Kaiser (GMC-North)		108	66.7	▲
San Francisco Health Plan		120	64.2	▲
Santa Barbara Regional Health Authority		422	62.3	▲
Central Coast Alliance for Health		411	56.7	
Blue Cross of California (GMC-North)		206	52.4	
Health Plan of San Mateo		432	47.7	
Blue Cross of California (CP)		373	45.8	
Blue Cross of California (Stanislaus)		31	45.2	
Health Net (GMC-North)		87	41.4	
Kern Family Health Care		266	38.0	
2001 Medi-Cal Managed Care Average			**37.6**	
Western Health Advantage		74	36.5	
Health Plan of San Joaquin		108	35.2	
Contra Costa Health Plan		132	34.8	
Alameda Alliance for Health		351	33.0	
Partnership Health Plan of California		432*	32.6	
Santa Clara Family Health Plan		215	27.0	
Health Net (CP)		432	25.7	
Community Health Group		377	25.2	
Inland Empire Health Plan		212	24.1	
L.A. Care Health Plan		415	13.7	▼
Blue Cross of California (Tulare)		67	10.4	▼
Molina Medical Centers		97	9.3	▼
CalOptima		**NR**	**NR**	▼
Maxicare		**NR**	**NR**	▼
Sharp Health Plan		**NR**	**NR**	▼
UCSD Health Plan		**NR**	**NR**	▼
Health Net (GMC-South)		23	NA	
Blue Cross of California (GMC-South)		21	NA	
Kaiser (GMC-South)		19	NA	
Universal Care		15	NA	
Molina Medical Centers (GMC-North)		0	NA	

2001 Medi-Cal Managed Care Weighted Average **38.5%**

*This denominator was adjusted for the calculation of the Medi-Cal managed care average.

▲ This rate was above the HPL (i.e., the NCQA national Medicaid 90th percentile of 57.9 percent).
▼ This rate was below the MPL (i.e., the NCQA national Medicaid 25th percentile of 18.1 percent).

Table 11. Trends in the HEDIS Rates for Well-Child Visits in the First 15 Months of Life (Six or More Visits)

Medi-Cal Managed Care Plan	HEDIS Rates (%)			Trend 1999-2001
	1999	2000	2001	
Kaiser (GMC-North)	NR	63.9	66.7	↔
San Francisco Health Plan	48.7	67.4	64.2	↑
Santa Barbara Regional Health Authority	42.9	58.1	62.3	↑
Central Coast Alliance for Health	19.9	49.5	56.7	↑
Blue Cross of California (GMC-North)	6.5	53.6	52.4	↑
Health Plan of San Mateo	40.0	44.2	47.7	↑
Blue Cross of California (CP)	6.7	40.5	45.8	↑
Blue Cross of California (Stanislaus)	NA	23.1	45.2	↑
Health Net (GMC-North)	30.0	43.4	41.4	↑
Kern Family Health Care	30.6	38.4	38.0	↑
Medi-Cal Managed Care Average	**26.0**	**32.9**	**37.6**	↑
Western Health Advantage	12.9	40.0	36.5	↑
Health Plan of San Joaquin	NR	33.5	35.2	↔
Contra Costa Health Plan	NA	21.4	34.8	↑
Alameda Alliance for Health	26.1	31.1	33.0	↑
Partnership Health Plan of California	52.0	21.6	32.6	↓
NCQA 2000 National Medicaid Average: 30.2%				
Santa Clara Family Health Plan	38.2	27.1	27.0	↓
Health Net (CP)	16.2	27.2	25.7	↑
Community Health Group	NA	0.0	25.2	↑
Inland Empire Health Plan	16.3	24.3	24.1	↑
L.A. Care Health Plan	NR	8.2	13.7	↑
Blue Cross of California (Tulare)	NA	NA	10.4	NA
Molina Medical Centers	1.5	8.2	9.3	↑
Blue Cross of California (GMC-South)	NA	NA	NA	NA
Health Net (GMC-South)	NA	NA	NA	NA
Kaiser (GMC-South)	NA	NA	NA	NA
Molina Medical Centers (GMC-North)	NA	NA	NA	NA
Universal Care	NA	NA	NA	NA
CalOptima	23.8	36.8	NR	NR
Maxicare	NA	10.8	NR	NR
Sharp Health Plan	NA	NR	NR	NR
UCSD Health Plan	NA	NA	NR	NR

↑ Indicates the rate for the health plan increased at least five percentage points.
↔ Indicates the rate for the health plan increased or decreased by less than five percentage points.
↓ Indicates the rate for the health plan decreased at least five percentage points.

Well-Child Visits in the Third, Fourth, Fifth and Sixth Year of Life

The AAP recommends annual well-child visits for children three to six years of age.[5] These check-up visits during the preschool and early school years allow clinicians to detect vision, speech, and language problems at the earliest opportunity. Early intervention in these areas can improve the child's communication skills and reduce language and learning problems.

Results

The results in Table 12 on page 27 show the rates for health plans ranged from a low of 43.5 percent to a high of 79.0 percent. The overall 2001 Medi-Cal managed care average of 56.4 percent was nearly identical to the 2000 Medi-Cal managed care average of 56.7 percent. Forty percent (12 out of 30) of the reporting health plans had rates above the 2001 Medi-Cal managed care average.

The NCQA 2000 national Medicaid average of 49.0 percent was exceeded by 80.0 percent (20 of the 25) of the reporting health plans. (Please see Table 12.) Two plans had rates above the HPL of 68.2 percent. None of the plans were below the MPL.

Trends

Table 13 on page 28 examines the trends from 1999 to 2001 for *Well-Child Visits in the Third, Fourth, Fifth and Sixth Year of Life*. For this measure, the Medi-Cal managed care average only improved from 51.7 percent in 1999 to 56.4 percent in 2001. Five plans (22.7 percent) achieved improvements of more than ten percentage points. The plan with the highest rate, Sharp Health Plan at 79.0 percent, increased their rate by 23.9 percentage points since 2000. Sharp Health Plan attributed this increase to a greater awareness of HEDIS measures and reporting among their providers, as well as a concerted effort to increase encounter data submission.

Only two health plans, Contra Costa Health Plan and Kaiser GMC-South, had statistically significant (p-value < 0.05) declines in their rates. However, for both of these health plans, the rate for 2000 was inflated due to a programming error.

There was virtually no change (0.3 percentage points) in performance for this measure between 2000 and 2001. Of the 2,673 eligible children in this category, the rates imply that 61 *fewer* children received this service in 2001 than in 2000.

[5] "Recommendations for Preventive Pediatric Health Care (RE9939)," *American Academy of Pediatrics Policy Statement*, Vol. 105:3, March 2000, p. 645.

Quality Improvement Efforts

Blue Cross of California (Stanislaus), Community Health Group, Inland Empire Health Plan, L.A. Care Health Plan, San Francisco Health Plan, Sharp Health Plan, and Universal Care all had substantial increases in their 2001 HEDIS rate compared to 2000. A summary of the strategies these Medi-Cal managed care plans used in 2000 to improve rates is presented below:

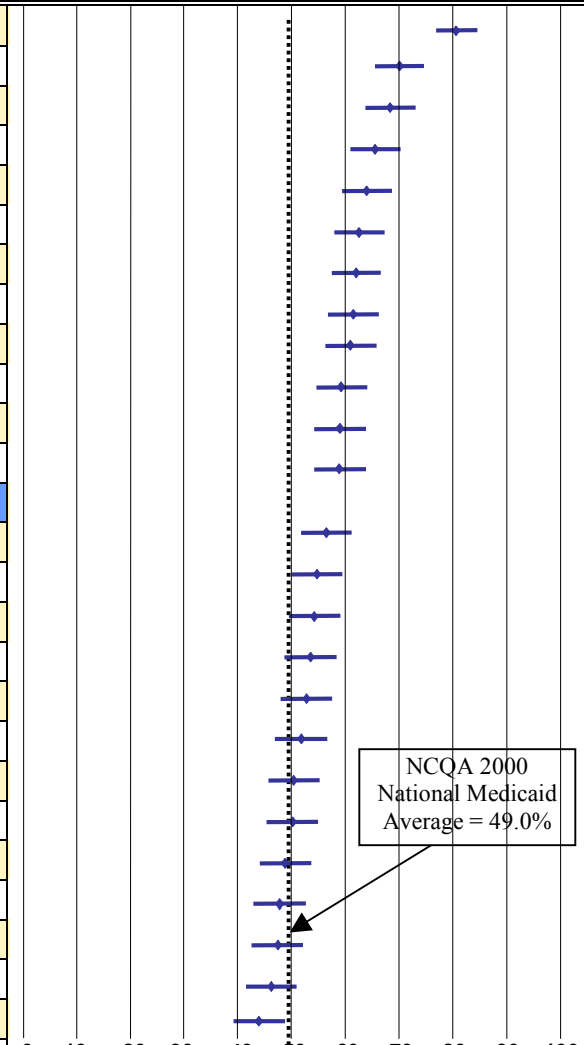
- Created a provider incentive program that gave providers additional fees for well-child visits, after submission of a completed encounter form.
- Increased provider education about HEDIS measures and requirements.
- Sent newsletter to managed care members discussing importance of HEDIS and the need for members to get recommended services.
- Sent mail to members to remind them of needed well-child visits.

Please see Table 29 in Appendix E for specific information for the individual Medi-Cal managed care plans.

Table 12. Well-Child Visits in the Third, Fourth, Fifth and Sixth Year of Life

Description: The percentage of Medicaid enrolled members who were three, four, five, or six years old during the 12-month study period who were continuously enrolled during that period (with no more than a one-month gap in coverage) and who received one or more well-child visit(s) with a primary care practitioner during the study year.

Medi-Cal Managed Care Plan	95% Confidence Intervals	Sample Size	Rate (%)	HPL/ MPL
Sharp Health Plan		453	79.0	▲
San Francisco Health Plan		424	68.6	▲
Community Health Group		411	66.9	
Santa Clara Family Health Plan		432	64.1	
Blue Cross of California (CP)		432	62.5	
Inland Empire Health Plan		432	61.1	
Molina Medical Centers		453	60.5	
Kern Family Health Care		432	60.0	
Health Net (GMC-North)		432	59.5	
Alameda Alliance for Health		432	57.6	
Health Plan of San Joaquin		430	57.4	
Blue Cross of California (Tulare)		432	57.4	
2001 Medi-Cal Managed Care Average			**56.4**	
Blue Cross of California (GMC-North)		432	56.3	
Contra Costa Health Plan		431*	54.5	
Blue Cross of California (Stanislaus)		431	54.1	
Maxicare		411	53.3	
Western Health Advantage		432*	52.5	
Universal Care		411	51.6	
Health Net (CP)		432	50.2	
Blue Cross of California (GMC-South)		431	49.9	
Kaiser (GMC-South)		432*	48.6	
L.A. Care Health Plan		415	47.5	
Kaiser (GMC-North)		431*	47.1	
UCSD Health Plan		453	45.9	
Health Net (GMC-South)		432	43.5	
	0 10 20 30 40 50 60 70 80 90 100			
Molina Medical Centers (GMC-North)		6	NA	



2001 Medi-Cal Managed Care Weighted Average **54.2%**

*These denominators were adjusted for the calculation of the Medi-Cal managed care average.

▲ This rate was above the HPL (i.e., the NCQA national Medicaid 90th percentile of 68.2 percent).
▼ This rate was below the MPL (i.e., the NCQA national Medicaid 25th percentile of 38.9 percent).

Table 13. Trends in the HEDIS Rates for Well-Child Visits in the Third, Fourth, Fifth and Sixth Year of Life

Medi-Cal Managed Care Plan	HEDIS Rates (%)			Trend 1999-2001
	1999	2000	2001	
Sharp Health Plan	NA	55.1	79.0	↑
San Francisco Health Plan	63.8	57.4	68.6	↔
Community Health Group	NA	58.6	66.9	↑
Santa Clara Family Health Plan	55.5	60.2	64.1	↑
Blue Cross of California (CP)	59.8	65.5	62.5	↔
Inland Empire Health Plan	45.5	52.0	61.1	↑
Molina Medical Centers	48.4	57.7	60.5	↑
Kern Family Health Care	61.0	65.3	60.0	↔
Health Net (GMC North)	59.4	60.2	59.5	↔
Alameda Alliance for Health	48.8	58.3	57.6	↑
Blue Cross of California (Tulare)	NA	NA	57.4	NA
Health Plan of San Joaquin	52.4	62.7	57.4	↑
Medi-Cal Managed Care Average	**51.7**	**56.7**	**56.4**	↔
Blue Cross of California (GMC-North)	55.7	56.6	56.3	↔
Contra Costa Health Plan	74.0	74.3	54.5	↓
Blue Cross of California (Stanislaus)	47.7	47.2	54.1	↑
Maxicare Health Plan	46.7	51.0	53.3	↑
Western Health Advantage	34.3	55.8	52.5	↑
Universal Care	NA	43.1	51.6	↑
Health Net (CP)	42.4	49.2	50.2	↑
Blue Cross of California (GMC-South)	NA	49.1	49.9	↔
NCQA 2000 National Medicaid Average: 49.0%				
Kaiser (GMC-South)	NA	78.9	48.6	↓
LA Care Health Plan	28.6	40.5	47.5	↑
Kaiser (GMC-North)	NR	48.5	47.1	↔
UCSD Health Plan	NA	NA	45.9	NA
Health Net (GMC-South)	NA	NA	43.5	NA
Molina Medical Centers (GMC-North)	NA	NA	NA	NA

↑ Indicates the rate for the health plan increased at least five percentage points.
↔ Indicates the rate for the health plan increased or decreased by less than five percentage points.
↓ Indicates the rate for the health plan decreased at least five percentage points.

Adolescent Well-Care Visits

Adolescence is a period of profound change. More changes take place in anatomy, physiology, mental and emotional functioning, and social development during adolescence than in any other life stage, except infancy. The attitudes and behaviors molded during adolescence often determine the lifestyle and health habits of adulthood, creating long-term health implications.

The American Medical Association, the Federal government's Bright Future program, and the AAP all recommend comprehensive annual checkups for adolescents.[6] These annual checkups provide opportunities for addressing the physical, emotional, and social aspects of adolescents' health.

Results

The overall 2001 Medi-Cal managed care average of 26.9 percent was three percentage points lower than in 2000. (Please see Table 14 on page 31.) Although the overall Medi-Cal managed care average had a small decline, 40.0 percent (12 out of 30) of the reporting plans were at or above the NCQA 2000 national Medicaid average of 28.0 percent. One health plan, CalOptima, exceeded 40.0 percent. The rates ranged from a low of 16.6 percent to a high of 40.3 percent

None of the health plans were above the established HPL of 44.4 percent for 2001. Four health plans were below the MPL of 19.3 percent.

Trends

The Medi-Cal managed care rate increased from 21.2 percent in 1999 to 26.9 percent in 2001 (Table 15 on page 32). Fifteen plans (50.0 percent) had rates that improved by more than five percentage points. Six of the 30 reporting plans (20.0 percent) had an improvement of more than ten percentage points.

Santa Barbara Regional Health Authority had a decline of more than five percentage points in its rate between 1999 and 2001. When contacted by HSAG, Santa Barbara Regional Health Authority indicated they had not determined the reason for this decline. All of the other rates for measures in the DHS External Accountability Set were above the HPL for Santa Barbara Regional Health Authority, with the exception of the new measure, *Appropriate Use of Medications for People with Asthma*.

Western Health Advantage, Central Coast Alliance for Health, Contra Costa Health Plan, and Kaiser GMC-South all had statistically significant (p-value < 0.05) declines in their rates between 2000 and 2001. The Kaiser GMC-South rate for 2000 was inflated due to a programming error. HSAG performed an NCQA HEDIS Compliance Audit for Kaiser GMC-South for the first time in 2001. HSAG assisted the health plan in correcting previous errors, which accounts for the reported decline.

[6] American Medical Association, Department of Adolescent Health, "Guidelines for Adolescent Preventive Services (GAPS)," 1997, p. 1.

Contra Costa Health Plan attributed their decline to the use of administrative method. The hybrid method, which uses administrative data and medical record review, usually results in higher rates. Despite this decline, Contra Costa Health Plan was still above the MPL and slightly more than one percentage point higher than their rate in 1999.

Western Health Advantage changed the payment structure for their providers and began paying providers on a fee-for-services basis for adolescent well-care visits. This incentive was expected to increase their HEDIS 2001 rate. On further investigation by Western Health Advantage, they discovered providers were completing more "partial" well-care visits. In other words, as part of the standardized methodology, HEDIS requires the well-care visits to consist of a history, physical examination, and health education. The "partial" well-care visits typically only had two of the three required components of the well-care visit. Western Health Advantage indicated that they intend to conduct provider education and training in order to improve this HEDIS rate.

Central Coast Alliance for Health began operating in a second county (Monterey) in October 1999. This new county doubled their eligible members for HEDIS 2001 and was directly related to the decline in the plan's rate. Central Coast Alliance for Health noted that they have significantly increased their staff to manage the increase and provide the recommended well-care visits to their members.

The 2001 Medi-Cal managed care average for this measure was 26.9 percent, which represents a decline of three percentage points compared to 2000. Because the eligible adolescent population was very large (412,204), these three percentage points imply that 12,366 *fewer* adolescents had at least one well-care visit in 2001 than in the previous year.

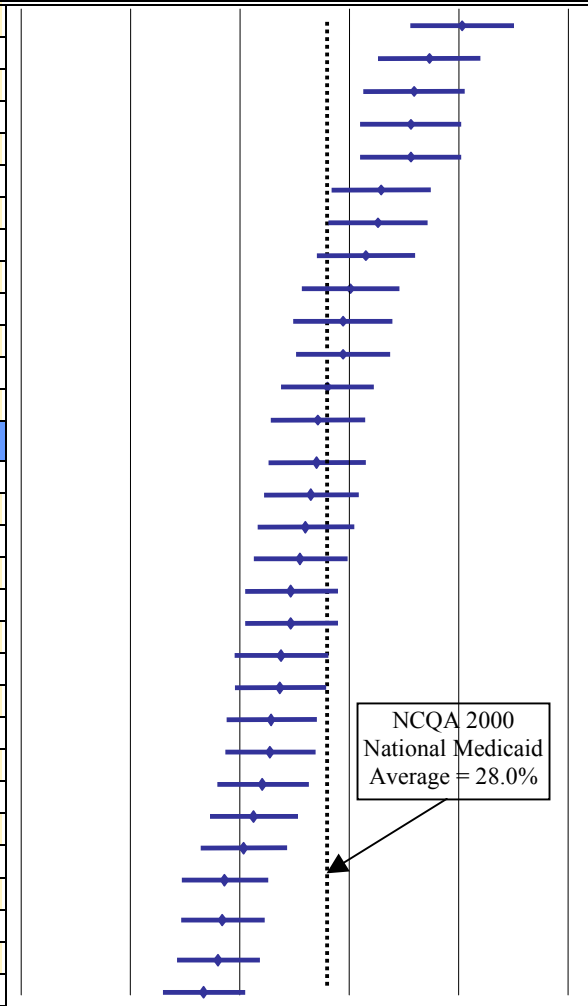
Quality Improvement Efforts

Partnership Health Plan went from 27.3 percent in 2000 to 35.6 percent in 2001. This was the only statistically significant increase among the Medi-Cal managed care plans. Partnership Health plan attributed the increase in their rate to the following:

- Published HEDIS 2000 rates in the newsletter to members and shared "Best Practices" with the participating providers.
- Increased provider awareness and education about recommended services and the importance of HEDIS reporting.

Table 14. Adolescent Well-Care Visits

Description: The percentage of Medicaid enrolled members between the age of 12 and 21 years, who were continuously enrolled in the health plan for the 12-month study period, (with no more than a one-month gap in coverage) and who received one or more well-care visit(s) with a primary care practitioner during the study period.

Medi-Cal Managed Care Plan	95% Confidence Intervals	Sample Size	Rate (%)	HPL/ MPL
CalOptima		432	40.3	
Health Plan of San Joaquin		432	37.3	
Health Net (GMC-North)		432	35.9	
Partnership Health Plan of California		432	35.6	
San Francisco Health Plan		432	35.6	
Alameda Alliance for Health		432	32.9	
Santa Clara Family Health Plan		432	32.6	
Inland Empire Health Plan		432	31.5	
Blue Cross of California (CP)		432*	30.1	
Molina Medical Centers		453	29.4	
Community Health Group		411	29.4	
Sharp Health Plan		453	28.0	
Kern Family Health Care		432	27.1	
2001 Medi-Cal Managed Care Average			**26.9**	
Maxicare		411	26.8	
Blue Cross of California (GMC-North)		433*	26.3	
Western Health Advantage		411	25.8	
Health Net (CP)		431	25.3	
Health Net (GMC-South)		432	24.5	
Health Plan of San Mateo		432	24.5	
Central Coast Alliance for Health		411	23.6	
Kaiser (GMC-North)		434*	23.5	
Santa Barbara Regional Health Authority		432	22.7	
Contra Costa Health Plan		430*	22.6	
UCSD Health Plan		411	21.9	
Blue Cross of California (Tulare)		432*	21.1	
Blue Cross of California (Stanislaus)		431*	20.2	
Universal Care		411	18.5	▼
Blue Cross of California (GMC-South)		432*	18.3	▼
Kaiser (GMC-South)		431*	17.9	▼
L.A. Care Health Plan		415	16.6	▼
	0 10 20 30 40 50			
Molina Medical Centers (GMC-North)		11	NA	
2001 Medi-Cal Managed Care Weighted Average	**25.8%**			

*These denominators were adjusted for the calculation of the Medi-Cal managed care average.

▲ This rate was above the HPL (i.e., the NCQA national Medicaid 90th percentile of 44.4 percent).
▼ This rate was below the MPL (i.e., the NCQA national Medicaid 25th percentile of 19.3 percent).

Table 15. Trends in the HEDIS Rates for Adolescent Well Care Visits

Medi-Cal Managed Care Plan	HEDIS Rates (%)			Trend 1999-2001
	1999	2000	2001	
CalOptima	22.7	35.2	40.3	↑
Health Plan of San Joaquin	12.9	40.3	37.3	↑
Health Net (GMC-North)	32.4	40.4	35.9	↔
Partnership Health Plan of California	29.9	27.3	35.6	↑
San Francisco Health Plan	29.7	30.4	35.6	↑
Alameda Alliance for Health	23.6	34.5	32.9	↑
Santa Clara Family Health Plan	20.0	31.5	32.6	↑
Inland Empire Health Plan	23.1	35.9	31.5	↑
Blue Cross of California (CP)	20.1	23.5	30.1	↑
Community Health Group	NA	29.4	29.4	↔
Molina Medical Centers	20.2	31.4	29.4	↑
Sharp Health Plan	NA	24.9	28.0	↔
NCQA 2000 National Medicaid Average: 28.0%				
Kern Family Health Care	19.2	32.4	27.1	↑
Medi-Cal Managed Care Average	**21.2**	**29.9**	**26.9**	↑
Maxicare	14.4	29.9	26.8	↑
Blue Cross of California (GMC-North)	17.8	26.9	26.3	↑
Western Health Advantage	12.7	34.8	25.8	↑
Health Net (CP)	16.9	28.7	25.3	↑
Health Net (GMC-South)	NA	NA	24.5	NA
Health Plan of San Mateo	26.0	27.3	24.5	↔
Central Coast Alliance for Health	19.0	33.8	23.6	↔
Kaiser (GMC-North)	NR	24.3	23.5	↔
Santa Barbara Regional Health Authority	28.8	26.4	22.7	↓
Contra Costa Health Plan	21.5	34.2	22.6	↔
UCSD Health Plan	NA	NA	21.9	NA
Blue Cross of California (Tulare)	NA	NA	21.1	NA
Blue Cross of California (Stanislaus)	17.5	18.3	20.2	↔
Universal Care	NA	19.7	18.5	↔
Blue Cross of California (GMC-South)	NA	19.3	18.3	↔
Kaiser (GMC-South)	NA	50.2	17.9	↓
L.A. Care Health Plan	8.2	17.4	16.6	↑
Molina Medical Centers (GMC-North)	NA	NA	NA	NA

↑ Indicates the rate for the health plan increased at least five percentage points.
↔ Indicates the rate for the health plan increased or decreased by less than five percentage points.
↓ Indicates the rate for the health plan decreased at least five percentage points.

Timeliness of Prenatal Care

The Medicaid Letter, April 2000, reporting on a study prepared by the National Center for Chronic Disease Prevention and Health Promotion, states, "Medicaid recipients were more than twice as likely as those not enrolled in Medicaid to receive late or no prenatal care (36 percent versus 14 percent)."[7] The care provided to pregnant women before, during, and after delivery is critical to the health of both the mother and child. Early entry into prenatal care may reduce the incidence of low birth weight babies, as well as the costs and complications associated with high-risk pregnancies.

Results

The rates among health plans for this measure ranged from a low of 29.5 percent to a high of 88.3 percent (Table 16 on page 35). The 2001 Medi-Cal managed care average of 69.1 percent was exceeded by 65.5 percent (19 out of 29) of the reporting health plans. Six health plans (20.7 percent) had rates above the HPL of 79.5 percent.

Maxicare, Health Net (CP), Health Net GMC-North, Health Net GMC-South, and Sharp Health Plan were below the MPL of 46.0 percent. Health Net attributed their low rate to a change in the organization of the company, including using a new vendor in the collection and reporting of their HEDIS rates. As of the time of this report, Maxicare no longer participated in the Medi-Cal program, and the reason for its low rate was not determined.

In 2000, Sharp Health Plan received an NR designation for *Prenatal Care in the First Trimester* and *Initiation of Prenatal Care*. This was due to an electronic error. In 2001, Sharp Health Plan received an NR for *Timeliness of Prenatal Care* due to difficulties in locating the medical records for this measure. This internal issue has been corrected, and Sharp Health Plan is expected to be able to report this measure for HEDIS 2002.

One of the challenges health plans faced in the production of this particular measure was the incorrect publication of the *HEDIS 2001 Technical Specifications*. NCQA subsequently released revisions to this measure, but several health plans had difficulty obtaining these revisions promptly and later had to revise their computer programming. This caused an average delay of three weeks in their pursuit of medical records, which may have had a negative impact on the number of Medi-Cal records retrieved.

Trends

For HEDIS 2000, the overall Medi-Cal managed care average for *Prenatal Care in the First Trimester* was 61.4 percent, while *Initiation of Prenatal Care* had a 72.1 percent Medi-Cal managed care average. Since this new measure is a combination of the two HEDIS 2000 measures, the expected average (assuming the rates remain the same) for 2001 should have been close to 67 percent. It was, in fact, 69.1 percent.

[7] HealthCare Press, "The Medicaid Letter," Vol. 6: 4, April 2000, p. 2.

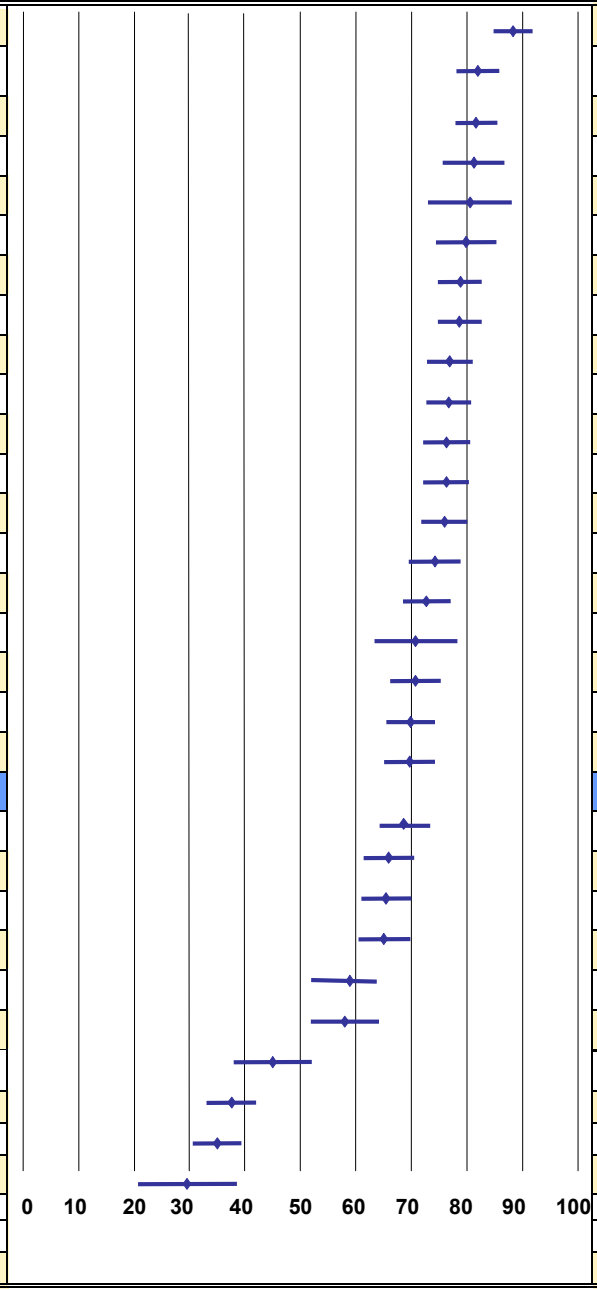
Since this measure combined two measures used in 2000, there were no comparable data for 2001. Nevertheless, the results indicated that seven out of ten pregnant women enrolled in a Medi-Cal managed care plan received prenatal care in a timely manner. This implies that 27,217 out of 38,881 eligible women in 2001 received timely prenatal care, while 11,664 pregnant women did not have a documented prenatal visit within the recommended time period.

Quality Improvement Efforts

Because this measure is new and there were no comparable rates between 2000 and 2001, this section has been omitted for this measure. However, this HEDIS measure is closely related to *Postpartum Care* and the quality improvement efforts utilized by health plans for *Postpartum Care Visits* are listed in Appendix E of this report.

Table 16. Timeliness of Prenatal Care

Description: This measure determines the percentage of women who delivered a live birth between November 6, 1999 and November 5, 2000, were continuously enrolled in the health plan for 43 days prior to delivery through 56 days after delivery, and who received a prenatal care visit in the first trimester or within 42 days of enrollment in the health plan. This is a new measure that combines *Prenatal Care in the First Trimester* and *Initiation of Prenatal Care* into a single measure for HEDIS 2001.

Medi-Cal Managed Care Plan	95% Confidence Intervals	Sample Size	Rate (%)	HPL/ MPL
Santa Barbara Regional Health Authority		350	88.3	▲
Contra Costa Health Plan		411	82.0	▲
Santa Clara Family Health Plan		431	81.7	▲
UCSD Health Plan		208	81.3	▲
Kaiser (GMC-South)		118	80.5	▲
Blue Cross of California (GMC-South)		223	79.8	▲
Health Plan of San Mateo		423	78.7	
Blue Cross of California (Stanislaus)		432	78.7	
Blue Cross of California (CP)		431	76.8	
Partnership Health Plan of California		449	76.6	
Central Coast Alliance for Health		411	76.4	
Blue Cross of California (GMC-North)		431	76.3	
Kern Family Health Care		432	75.9	
San Francisco Health Plan		360	74.2	
Inland Empire Health Plan		428	72.7	
Universal Care		154	70.8	
Kaiser (GMC-North)		400	70.8	
CalOptima		431	69.8	
Community Health Group		411	69.6	
2001 Medi-Cal Managed Care Average			**69.1**	
Alameda Alliance for Health		418	68.7	
Blue Cross of California (Tulare)		432	65.7	
Molina Medical Centers		450	65.3	
Health Plan of San Joaquin		431	65.0	
L.A. Care Health Plan		414	58.7	
Western Health Advantage		259	57.9	
Maxicare		207	44.9	▼
Health Net (CP)		476	37.4	▼
Health Net (GMC-North)		476	34.9	▼
Health Net (GMC-South)		112	29.5	▼
	0 10 20 30 40 50 60 70 80 90 100			
Sharp Health Plan		**NR**	**NR**	▼
Molina Medical Centers (GMC-North)		25	NA	
2001 Medi-Cal Managed Care Weighted Average	**66.3%**			
NCQA 2000 National Medicaid Average	**NA**			

▲ This rate was above the HPL of 79.5 percent.
▼ This rate was below the MPL of 46.0 percent.

Postpartum Care (formerly Check-ups After Delivery)

The American College of Obstetricians and Gynecologists (ACOG) recommends that women see their health care provider at least once between four and six weeks after giving birth.[8] The first postpartum visit gives clinicians who care for new mothers the opportunity to conduct a physical examination and offer advice and assistance, including counseling on family planning and nutrition.

Results

The rates ranged from a low of 15.2 percent to a high of 74.9 percent. Although the overall 2001 Medi-Cal managed care average did not have a noticeable increase in the rate, 56.7 percent (17 out of 30) of the reporting health plans were above the 2001 Medi-Cal managed care average and 53.3 percent (16 out of 30) exceeded the NCQA 2000 national Medicaid average (Table 17, page 38). Three health plans exceeded the HPL of 61.0 percent.

Trends

Table 18 on page 39 examines the trend from 1999 to 2001 for *Postpartum Care* visits. For this measure, the Medi-Cal managed care average did not show a substantial improvement between 1999 and 2001. However, 43.3 percent of the plans improved their rates by more than five percentage points, and seven (23.3 percent) of those plans achieved improvements of more than ten percentage points.

San Francisco Health Plan, Health Net (CP), and Health Net GMC-North had a decline of more than five percentage points in their rates between 1999 and 2001. San Francisco Health Plan stated they believe the rate reported in 1999 was inflated (though they do not know why) and the rates reported in 2000 and 2001 were accurate rates. Health Net attributed the decline to a change in the organization of the company, including using a new vendor to collect and report their HEDIS rates. In addition, Health Net had difficulty in locating medical records for postpartum visits since they could not identify specialists in their system.

Seven health plans were below the MPL of 34.5 percent. Health Net GMC-North, Kaiser GMC-South, Universal Care, Health Net (CP), and Health Plan of San Joaquin all had statistically significant (p-value < 0.05) declines in their rates between 2000 and 2001. The rates for these health plans declined from between 5.8 percentage points to 24.5 percentage points.

At the time of this report, Kaiser GMC-South was still investigating the reason for the decline in their rate. Kaiser GMC-South had implemented data capture changes on provider forms, and this may have been a contributing factor.

The Health Plan of San Joaquin did not know the reason for their decline, but they have implemented a quality improvement program that focuses on postpartum visits.

[8] National Committee for Quality Assurance, *NCQA's State of Managed Care Quality Report*, Washington, D.C., 2000, p. 32.

Universal Care attributed their low rate to finding only 46 medical records for their members who qualified for the *Postpartum Care* measure. As of the time of this report, Universal Care was implementing a quality improvement effort to capture ACOG data for all members who present for delivery at the hospital. This data will contain the information of the physician who saw the member throughout the pregnancy and will help the plan to more easily locate the medical record.

The rate for this measure remained virtually the same (three-tenths of a percentage point difference) in 2001 as compared to 2000. This implies an additional 116 women out of an eligible population of 38,881 received the recommended postpartum care in 2001 as compared to 2000.

Quality Improvement Efforts

For the second year in a row, the *Postpartum Care* rate for Santa Barbara Regional Health Authority was above the HPL of 61.0 percent. CalOptima, Inland Empire Health Plan, Blue Cross of California GMC-South, Community Health Group, Contra Costa Health Plan, Sharp Health Plan, and Molina Medical Centers (CP) all showed substantial increases in their rates between 2000 and 2001. Although Sharp Health Plan and Molina Medical Centers (CP) were still both below the MPL of 34.5 percent, these plans demonstrated improvement over previous years. The following is a brief summary of the quality improvements undertaken by the managed care plans:

- Provider education was increased, including recommending services for women before and after delivery. One health plan designed a form that included all elements necessary for documentation of a positive postpartum exam. The forms were distributed to obstetricians' offices.

- Processes for collecting encounter data were improved, including providing incentives to providers.

- Special programs that focused on care provided to women during pregnancy and continued through postpartum care were created. All pregnant members were given a car seat and were eligible to receive gifts when they had their postpartum visit.

- Information that discussed the importance of HEDIS and the need for recommended services was mailed to members.

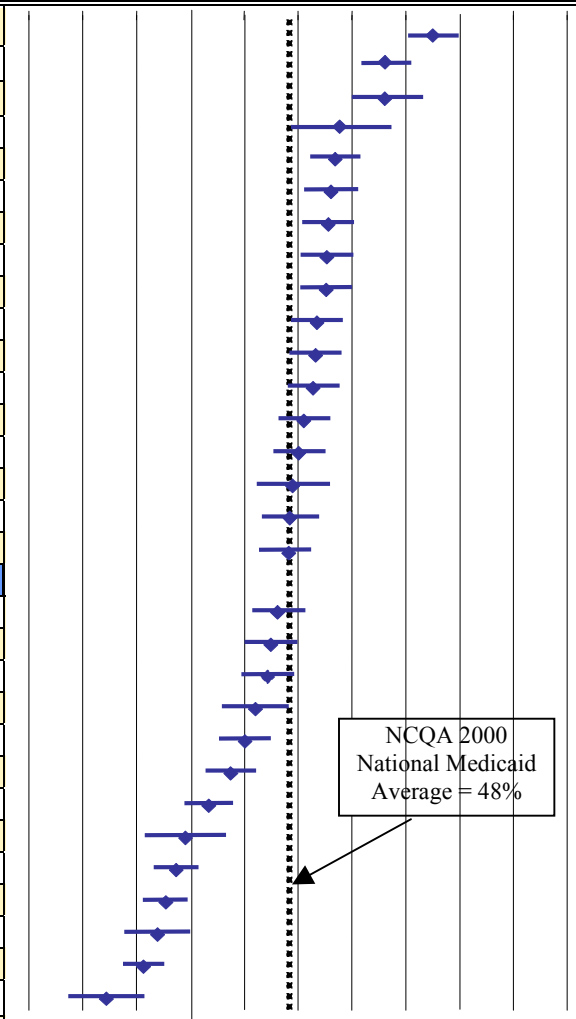
- One managed care plan worked with hospitals, so that hospitals would notify the plan when a member was admitted for delivery. A nurse from the health plan then met with the mother and discussed postpartum care. Reminder postcards with the actual range of dates when postpartum visits were needed were then sent to the member and the provider.

Please see Table 29 in Appendix E for specific information for the individual Medi-Cal managed care plans.

Table 17. Postpartum Care

Description: This measure determines the percentage of women who delivered a live birth between November 6, 1999 and November 5, 2000, were continuously enrolled in the health plan for 43 days prior to delivery through 56 days after delivery, and who received a postpartum visit on or between 21 days and 56 days after delivery.

Medi-Cal Managed Care Plan	95% Confidence Intervals	Sample Size	Rate (%)	HPL/ MPL
Santa Barbara Regional Health Authority		350	74.9	▲
UCSD Health Plan		208	66.4	▲
Health Plan of San Mateo		423	65.7	▲
Kaiser (GMC-South)		118	57.6	
Partnership Health Plan of California		449	56.8	
Kaiser (GMC-North)		400	56.0	
Blue Cross of California (GMC-North)		431	55.5	
Central Coast Alliance for Health		411	55.2	
Kern Family Health Care		432	55.1	
Blue Cross of California (CP)		431	53.4	
Santa Clara Family Health Plan		431	53.1	
CalOptima		431	52.7	
Blue Cross of California (Stanislaus)		432	50.9	
Inland Empire Health Plan		428	50.0	
Blue Cross of California (GMC-South)		223	48.9	
San Francisco Health Plan		360	48.3	
Blue Cross of California (Tulare)		432	47.5	
2001 Medi-Cal Managed Care Average			**46.8**	
Community Health Group		411	46.7	
Contra Costa Health Plan		411	45.7	
L.A. Care Health Plan		414	45.2	
Western Health Advantage		259	42.9	
Alameda Alliance for Health		418	40.9	
Health Plan of San Joaquin		431	38.3	
Sharp Health Plan		453	34.2	▼
Universal Care		154	29.9	▼
Health Net (CP)		476	28.2	▼
Molina Medical Centers		450	26.2	▼
Maxicare		207	24.6	▼
Health Net (GMC-North)		476	22.1	▼
Health Net (GMC-South)		112	15.2	▼
	0 10 20 30 40 50 60 70 80 90 100			
Molina Medical Centers (GMC-North)		25	NA	



2001 Medi-Cal Managed Care Weighted Average	**46.6%**

▲ This rate was above the HPL of 61.0 percent.
▼ This rate was below the MPL of 34.5 percent.

Table 18. Trends in the HEDIS Rates for Postpartum Care

Medi-Cal Managed Care Plan	HEDIS Rates (%)			Trend 1999-2001
	1999	2000	2001	
Santa Barbara Regional Health Authority	69.9	71.4	74.9	↑
UCSD Health Plan	NA	NA	66.4	NA
Health Plan of San Mateo	54.0	63.7	65.7	↑
Kaiser (GMC-South)	NA	67.3	57.6	↓
Partnership Health Plan of California	53.5	53.2	56.8	↔
Kaiser (GMC-North)	NR	53.6	56.0	↔
Blue Cross of California (GMC-North)	57.6	56.3	55.5	↔
Central Coast Alliance for Health	39.0	57.8	55.2	↑
Kern Family Health Care	56.5	54.5	55.1	↔
Blue Cross of California (CP)	55.6	54.8	53.4	↔
Santa Clara Family Health Plan	41.5	56.3	53.1	↑
CalOptima	44.4	44.5	52.7	↑
Blue Cross of California (Stanislaus)	50.9	51.4	50.9	↔
Inland Empire Health Plan	40.4	40.7	50.0	↑
Blue Cross of California (GMC-South)	NA	41.4	48.9	↑
San Francisco Health Plan	61.4	44.5	48.3	↓
NCQA 2000 National Medicaid Average: 48.0%				
Blue Cross of California (Tulare)	NA	49.9	47.5	↔
Medi-Cal Managed Care Average	**46.2**	**46.5**	**46.8**	↔
Community Health Group	NA	34.8	46.7	↑
Contra Costa Health Plan	32.6	33.0	45.7	↑
L.A. Care Health Plan	38.4	41.2	45.2	↑
Western Health Advantage	33.0	44.2	42.9	↑
Alameda Alliance for Health	36.4	42.9	40.9	↔
Health Plan of San Joaquin	42.5	44.1	38.3	↔
Sharp Health Plan	NA	20.2	34.2	↑
Universal Care	NA	44.6	29.9	↓
Health Net (CP)	37.8	42.6	28.2	↓
Molina Medical Centers	14.0	15.3	26.2	↑
Maxicare	NR	NR	24.6	NA
Health Net (GMC-North)	35.9	46.6	22.1	↓
Health Net (GMC-South)	NA	NA	15.2	NA
Molina Medical Centers (GMC-North)	NA	NA	NA	NA

↑ Indicates the rate for the health plan increased at least five percentage points.
↔ Indicates the rate for the health plan increased or decreased by less than five percentage points.
↓ Indicates the rate for the health plan decreased at least five percentage points.

Eye Exams for People with Diabetes (COHS Only)

Diabetes is the seventh leading cause of death in the United States. However, when associated conditions also are included (e.g., congestive heart failure, myocardial infarction, stroke, etc.), diabetes can be considered the third leading cause of death. Blindness, kidney disease, and lower extremity amputations are debilitating complications of diabetes. According to the CDC, 5.9 percent of the U.S. population have diabetes, with 798,000 new cases of diabetes diagnosed each year. The disease and its complications cost the United States approximately $98 billion annually in medical care and lost wages. It is one of the more common chronic diseases afflicting adults.[9]

Diabetic retinopathy is one of the most common complications associated with diabetes and the leading cause of blindness among working-age Americans. Studies such as the Diabetes Control and Complications Trial (DCCT) have established that intensive diabetes management at an early stage can prevent and delay the progression of diabetic retinopathy. Regular screening also has been proven to dramatically decrease the costs associated with the management of diabetes.

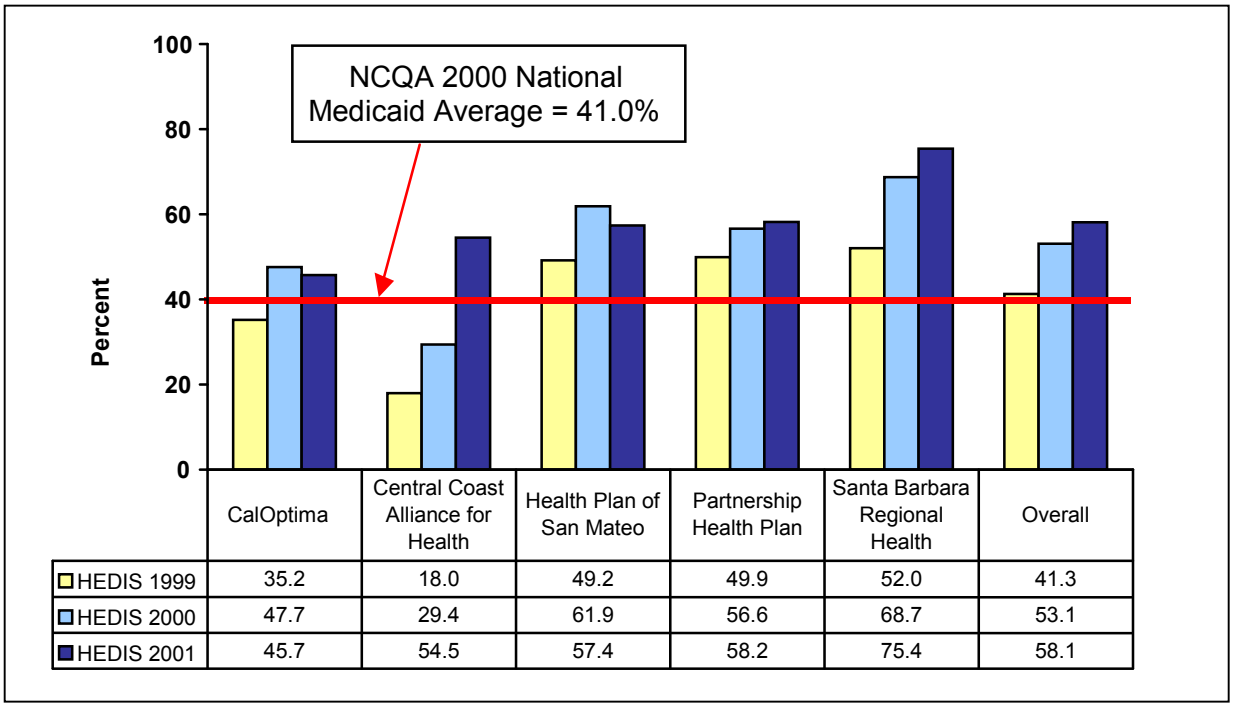
Because the COHS identified a high proportion of members with chronic illness, DHS and the COHS agreed to collect and report a HEDIS measure that better represented this segment of their Medi-Cal managed care membership. The HEDIS measure *Eye Exams for People with Diabetes* was chosen to replace *Well-Child Visits in the Third, Fourth, Fifth and Sixth Year of Life* for the COHS. The other health plans were not required to report on this measure.

Results

All five health plans had sample sizes of at least 411. Based on the confidence interval for that sample size, the rates presented are within ± 4.9 percent of the actual rate. (Please see Sampling section in Methodology, Appendix A.) The rates for this measure ranged from a low of 45.7 percent to a high of 75.4 percent (Figure 1 on page 41). All five health plans exceeded the NCQA 2000 national Medicaid average of 41.0 percent for this measure. None of the plans were below the MPL of 26.6 percent. Santa Barbara Regional Health Authority, at 75.4 percent, was above the HPL of 61.1 percent.

[9] "National Diabetes Fact Sheet: National estimates and general information on diabetes in the United States," Rev. ed., Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, November 1998, p. 1-5.

Figure 1. Eye Exams for People with Diabetes



	CalOptima	Central Coast Alliance for Health	Health Plan of San Mateo	Partnership Health Plan	Santa Barbara Regional Health	Overall
HEDIS 1999	35.2	18.0	49.2	49.9	52.0	41.3
HEDIS 2000	47.7	29.4	61.9	56.6	68.7	53.1
HEDIS 2001	45.7	54.5	57.4	58.2	75.4	58.1

Trends

Since 1999, the rates for all five plans have increased by more than five percentage points. Central Coast Alliance for Health had the largest increase for this measure, increasing from 18.0 percent in 1999 to 54.5 percent in 2001. Overall, the rate has increased 16.8 percentage points, from 41.3 percent in 1999 to 58.1 percent in 2001.

Quality Improvement Efforts

For the second year in a row, Santa Barbara Regional Health Authority was well above the HPL of 61.1 percent for this measure. Central Coast Alliance for Health had the largest increase in their rate. These two plans utilized the following strategies and attributed the improvement in their rate to these quality improvement efforts:

- Reports were sent to the high-volume providers each month that showed rates for the various HEDIS indicators for diabetes. A nurse in charge of this process then met with low-performing providers on a quarterly basis.
- Financial incentives were given to providers for completing tests on diabetic members and for showing improvement in outcomes.

- Diabetes was the focus of a quality improvement project and intervention for Santa Barbara Regional Health Authority.

- A department was created with direct responsibility for oversight of the entire HEDIS reporting process.

- Past HEDIS experience was applied to develop strategies for the enhancement of data collection capabilities and medical record pursuit.

Use of Appropriate Medications for People with Asthma

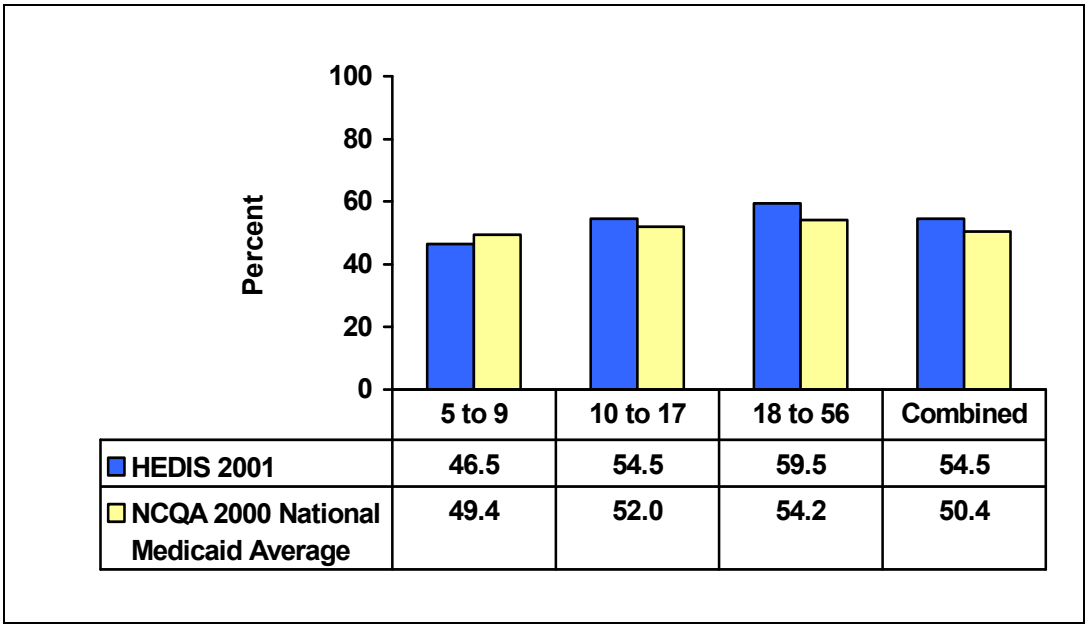
According to the NCQA *State of Managed Care Quality Report* (2000), asthma is the most common chronic childhood disease. Asthma affects more than 17 million people in the United States, including nearly five million children. Each year, 5,000 people in the United States die from complications associated with asthma. The annual cost associated with the treatment of asthma is estimated to be $14.5 billion. There are more than two million emergency room visits and 500,000 inpatient hospitalizations each year due to chronic diseases. It is estimated that nearly all of the emergency room visits and most of the deaths associated with asthma could be prevented with proper management.[10]

Results

This measure was reported using three age groups (5 to 9, 10 to 17, and 18 to 56 years of age), and an overall combined rate. All four rates have been presented in this report (Table 19 through Table 22 on pages 45 though 48), though the MPL and HPL are based only on the combined rate. As NCQA allowed only the administrative method to be used for this measure, health plans were required to use their entire eligible population and could not perform medical record review. Since the results for *Use of Appropriate Medications for People with Asthma* were based on the entire eligible population, there was no sampling error. Therefore, confidence intervals and weighted averages do not apply and were not shown in Tables 19 through 22 on pages 45 through 48.

The overall results by age group are shown below in Figure 2. The Medi-Cal managed care rates were above the NCQA 2000 national Medicaid averages for every rate except for the rate for the youngest age group.

Figure 2. Overall 2001 Medi-Cal Managed Care Rates by Age Group for Use of Appropriate Medications for People with Asthma



	5 to 9	10 to 17	18 to 56	Combined
HEDIS 2001	46.5	54.5	59.5	54.5
NCQA 2000 National Medicaid Average	49.4	52.0	54.2	50.4

[10] "NCQA's State of Managed Care Quality Report," by the National Committee for Quality Assurance, Washington, D.C., 2000, p. 20.

The overall 2001 Medi-Cal managed care average for the combined rate was 54.5 percent (Table 19 on page 45). Fourteen managed care plans, or 45.2 percent, were above the overall Medi-Cal managed care average, with rates ranging from a low of 36.1 percent to a high of 85.3 percent. Four plans achieved rates above the HPL of 64.9 percent.

Alameda Alliance for Health, Kaiser GMC-South, and Maxicare were all below the MPL of 44.9 percent. Both Kaiser GMC-South and Maxicare received an NR for this measure. Kaiser GMC-South experienced difficulties in collecting the pharmacy data according to the requirements of this measure, resulting in an underreported (biased) rate. Maxicare received an NR due to errors in their computer programming logic.

Trends

There were no comparative data from 1999 or 2000 since this was a new measure for the Medi-Cal managed care plans in 2001.

Table 19. Use of Appropriate Medications for People with Asthma - Combined Rate

Description: This measure is defined as the percentage of enrolled members (Total Cases in the table below) identified with *persistent asthma* between 5 and 56 years of age on December 31, 2000, who were continuously enrolled in the health plan during 1999 and 2000 (with no more than a one-month gap in coverage each year), and who received at least one dispensed prescription for inhaled corticosteroids, nedocromil, cromolyn sodium, leukotriene modifiers, or methylxanthines in 2000.

Medi-Cal Managed Care Plan	Percent	Total Cases	Rate (%)	HPL/ MPL
Kern Family Health Care		544	85.3	▲
Health Plan of San Joaquin		328	83.5	▲
CalOptima		2,772	67.2	▲
UCSD Health Plan		56	66.1	▲
Partnership Health Plan of California		938	64.6	
San Francisco Health Plan		412	59.0	
Santa Barbara Regional Health Authority		555	58.0	
Health Plan of San Mateo		426	57.5	
Community Health Group		193	56.5	
Blue Cross of California (CP)		5,558	56.0	
Universal Care		170	55.9	
Inland Empire Health Plan		1,669	55.7	
Central Coast Alliance for Health		411	55.2	
Blue Cross of California (Stanislaus)		550	54.9	
2001 Medi-Cal Managed Care Average		**29,558**	**54.5**	
Kaiser (GMC-North)		542	54.1	
Western Health Advantage		256	52.0	
Molina Medical Centers		412	51.9	
Santa Clara Family Health Plan		374	51.6	
Blue Cross of California (GMC-South)		67	50.7	
Sharp Health Plan		192	50.0	
Contra Costa Health Plan		959	49.6	
L.A. Care Health Plan		7,447	49.3	
Blue Cross of California (GMC-North)		1,267	49.2	
Health Net (GMC-North)		235	48.9	
Health Net (GMC-South)		59	47.5	
Health Net (CP)		2,895	45.0	
Blue Cross of California (Tulare)		2	NA	
Molina Medical Centers (GMC-North)		0	NA	
Alameda Alliance for Health		269	36.1	▼
Kaiser (GMC-South)		**NR**	**NR**	▼
Maxicare		**NR**	**NR**	▼
	0 20 40 60 80 100			
NCQA 2000 National Medicaid Average	**50.4%**			

▲ This rate was above the HPL (i.e., the NCQA national Medicaid 90th percentile of 64.9 percent).
▼ This rate was below the MPL (i.e., the NCQA national Medicaid 25th percentile of 44.9 percent).

Table 20. Use of Appropriate Medications for People with Asthma (5-9 Years of Age)

Medi-Cal Managed Care Plan	Percent	Total Cases	Rate (%)
Health Plan of San Joaquin		58	86.2
Kern Family Health Care		133	81.2
Partnership Health Plan of California		166	63.3
Health Plan of San Mateo		73	63.0
CalOptima		661	59.3
Community Health Group		64	57.8
San Francisco Health Plan		190	57.4
Santa Barbara Regional Health Authority		83	56.6
Central Coast Alliance for Health		58	53.4
Universal Care		38	52.6
Sharp Health Plan		54	51.9
Inland Empire Health Plan		476	51.7
Kaiser (GMC-North)		145	51.0
Blue Cross of California (CP)		1,513	49.0
2001 Medi-Cal Managed Care Average		**7,924**	**46.5**
Health Net (GMC-North)		32	43.8
Blue Cross of California (Stanislaus)		92	43.5
Molina Medical Centers		115	41.7
L.A. Care Health Plan		2,427	41.2
Contra Costa Health Plan		209	40.2
Alameda Alliance for Health		65	38.5
Blue Cross of California (GMC-North)		253	36.4
Health Net (CP)		839	34.2
Western Health Advantage		45	33.3
Santa Clara Family Health Plan		78	32.1
Blue Cross of California (GMC-South)		22	NA
Blue Cross of California (Tulare)		0	NA
Health Net (GMC-South)		17	NA
Molina Medical Centers (GMC-North)		0	NA
UCSD Health Plan		18	NA
Kaiser (GMC-South)		**NR**	**NR**
Maxicare		**NR**	**NR**
	0 20 40 60 80 100		
NCQA 2000 National Medicaid Average	**49.4%**		

There were no MPLs or HPLs for this age group.

Table 21. Use of Appropriate Medications for People with Asthma (10-17 Years of Age)

Medi-Cal Managed Care Plan	Percent	Total Cases	Rate (%)
Kern Family Health Care		169	86.4
Health Plan of San Joaquin		110	86.4
CalOptima		648	71.0
Partnership Health Plan of California		232	60.8
San Francisco Health Plan		58	60.3
Universal Care		54	57.4
Inland Empire Health Plan		576	56.9
Blue Cross of California (CP)		1,825	55.5
2001 Medi-Cal Managed Care Average		**9,082**	**54.5**
Sharp Health Plan		46	54.4
Blue Cross of California (Stanislaus)		160	53.1
Molina Medical Centers		161	52.8
Santa Clara Family Health Plan		101	52.5
L.A. Care Health Plan		2,487	52.2
Health Plan of San Mateo		88	51.1
Community Health Group		60	50.0
Health Net (CP)		1,066	48.1
Kaiser (GMC-North)		156	48.1
Contra Costa Health Plan		290	47.6
Central Coast Alliance for Health		79	45.6
Santa Barbara Regional Health Authority		105	44.8
Blue Cross of California (GMC-North)		366	44.3
Western Health Advantage		58	43.1
Health Net (GMC-North)		57	40.4
Alameda Alliance for Health		76	34.2
Blue Cross of California (GMC-South)		19	NA
Health Net (GMC-South)		19	NA
UCSD Health Plan		15	NA
Blue Cross of California (Tulare)		1	NA
Molina Medical Centers (GMC-North)		0	NA
Kaiser (GMC-South)		**NR**	**NR**
Maxicare		**NR**	**NR**
	0 20 40 60 80 100		
NCQA 2000 National Medicaid Average	**52.0%**		

There were no MPLs or HPLs for this age group.

Table 22. Use of Appropriate Medications for People with Asthma (18-56 Years of Age)

Medi-Cal Managed Care Plan	Percent	Total Cases	Rate (%)
Kern Family Health Care		242	86.8
Health Plan of San Joaquin		160	80.6
CalOptima		1,463	69.2
Partnership Health Plan of California		540	66.7
Santa Barbara Regional Health Authority		367	62.1
Blue Cross of California (CP)		2,220	61.1
Community Health Group		69	60.9
Western Health Advantage		153	60.8
San Francisco Health Plan		164	60.4
Kaiser (GMC-North)		241	59.8
Molina Medical Centers		136	59.6
2001 Medi-Cal Managed Care Average		**12,552**	**59.5**
Blue Cross of California (Stanislaus)		298	59.4
Santa Clara Family Health Plan		195	59.0
Central Coast Alliance for Health		274	58.4
Health Plan of San Mateo		265	58.1
Inland Empire Health Plan		617	57.5
Blue Cross of California (GMC-North)		648	56.9
Universal Care		78	56.4
Contra Costa Health Plan		460	55.2
L.A. Care Health Plan		2,533	54.2
Health Net (GMC-North)		146	53.4
Health Net (CP)		990	50.9
Sharp Health Plan		92	46.7
Alameda Alliance for Health		128	35.9
Blue Cross of California (GMC-South)		26	NA
Health Net (GMC-South)		23	NA
UCSD Health Plan		23	NA
Blue Cross of California (Tulare)		1	NA
Molina Medical Centers (GMC-North)		0	NA
Kaiser (GMC-South)		**NR**	**NR**
Maxicare		**NR**	**NR**

NCQA 2000 National Medicaid Average **54.2%**

There were no MPLs or HPLs for this age group.

Performance Summary

Summary of HEDIS 2001 Results

A summary of the HEDIS 2001 Medi-Cal managed care averages is presented below in Table 23. *Childhood Immunization Status* (Combinations 1 and 2), *Well-Child Visits in the First 15 Months of Life* (six or more visits), and *Eye Exams for People with Diabetes* have continued to show improvements in the rates each year. The HEDIS 2000 rates for *Well-Child Visits in the Third, Fourth, Fifth and Sixth Year of Life* showed improvement over 1999 rates (56.7 percent and 51.7 percent, respectively), but remained constant for the HEDIS 2001 rate (56.4 percent). *Postpartum Care* (formerly referred to as *Check-ups After Delivery*) was nearly identical for 1999, 2000, and 2001. The only measure with a noticeable decline from 2000 was *Adolescent Well-Care Visits,* which fell three percentage points for HEDIS 2001 (from 29.9 to 26.9 percent).

For six of these measures, the 2001 Medi-Cal managed care average was higher than the NCQA 2000 national Medicaid average. Two of the measures, *Adolescent Well-care Visits* and *Postpartum Care,* were below the NCQA 2000 national Medicaid average.

Table 23. Aggregate HEDIS Results (1999 – 2001)

DHS Accountability Set	Medi-Cal Managed Care Averages (%)			Medi-Cal Managed Care Weighted Averages** (%)		NCQA 2000 National Medicaid Average	MPL	HPL
	1999	2000	2001	2000	2001	(%)	(%)	(%)
Childhood Immunization Status Combination 1 (4:3:1:2:3 Series)	50.0	53.8	57.0	52.3	55.6	51.2	41.8	69.3
Childhood Immunization Status Combination 2 (4:3:1:2:3:1 Series)	32.5	44.3	51.5	44.3	50.5	38.0	27.6	55.9
Well-Child Visits in the First 15 Months of Life (Six or More Visits)	26.0	32.9	37.6	30.2	38.5	30.2	18.1	57.9
Well-Child Visits in the Third, Fourth, Fifth and Sixth Year of Life	51.7	56.7	56.4	50.8	54.2	49.0	38.9	68.2
Adolescent Well-Care Visits	21.2	29.9	26.9	26.7	25.8	28.0	19.3	44.4
Timeliness of Prenatal Care*	NA	NA	69.1	NA	66.3	NA*	46.0	79.5
Postpartum Care	46.2	46.5	46.8	46.7	46.6	48.0	34.5	61.0
Use of Appropriate Medications for People with Asthma (Combined Rate)**	NA	NA	54.5	NA	NA	50.4	44.9	64.9
Eye Exams for People With Diabetes	41.3	53.1	58.1	52.2	54.0	41.0	26.6	61.1

**Timeliness of Prenatal Care* was a new measure for 2001; the NCQA 2000 national Medicaid average and the Medi-Cal managed care averages for 1999 and 2000 were not available. The Medi-Cal managed care plans reported on *Use of Appropriate Medications for People with Asthma* for the first time in 2001, and therefore, the Medi-Cal managed care averages for 1999 and 2000 were not available.

** Weighted averages were calculated using each plan's eligible population. Since the results for *Use of Appropriate Medications for People with Asthma* were based on the entire eligible population, rather than a sample, weighted averages do not apply.

DHS established the MPLs and HPLs (shown in the last two columns of Table 23) in collaboration with HSAG and the managed care plans. The MPLs and HPLs for each measure have been defined as the NCQA 2000 national Medicaid 25th and 90th percentiles, respectively. *Timeliness of Prenatal Care* was a new measure for HEDIS 2001 and did not have available percentiles. The MPL and HPL for *Timeliness of Prenatal Care* was established using the Medi-Cal managed care average, plus or minus one standard deviation.

The purpose of the MPLs is to improve the services provided by the health plans to the Medi-Cal managed care members. Therefore, managed care plans that fall below the MPL may be given technical assistance by DHS and also may be subject to increased monitoring as an additional method to improve rates. Managed care plans with rates between the MPLs and the HPLs are expected to continue to improve their rates, while health plans above the HPLs are expected to maintain or improve their rates.

Table 24 on page 51 shows how individual health plans performed relative to the MPLs and HPLs for HEDIS 2000 and HEDIS 2001. This table shows that Santa Barbara Regional Health Authority, San Francisco Health Plan, and Contra Costa Health Plan typically reported the highest rates. L.A. Care Health Plan, Maxicare, Molina Medical Centers, and Sharp Health Plan generally had the lowest rates.

The biggest change occurred in the childhood immunization measure. This measure had five managed care plans below the MPL in 2000, but only one plan below the MPL in 2001. Two other measures that deserve mention are *Well-Child Visits in the Third, Fourth, Fifth and Sixth Year of Life* (WC) and *Eye Exams for People with Diabetes* (DIB). All of the Medi-Cal managed care plans that reported these measures were above the MPLs during 2000 or 2001.

An interesting phenomenon can be observed in this table. Several plans had higher rates for some measures, lower rates for others. These differences may reflect a plan's strategy for improvement. For example, plans may have focused their efforts on improving the rates for childhood immunizations and well-child visits and concentrated less on the two maternity-related measures (i.e., *Timeliness of Prenatal Care* and *Postpartum Care*). Consequently, the rates for childhood immunizations and well-child visits may have increased, while the rates for the maternity-related measures may have declined. Other factors affecting the rates may include changes in data collection capabilities, medical record documentation, encounter data completeness, or an actual increase or decrease in the services provided.

Table 24. Medi-Cal Managed Care Plans Below the MPLs or Above the HPLs for HEDIS 2000 and 2001

Medi-Cal Managed Care Plan	CI	WI	WC	WA	TPC	CAD	DIB	ASM
Alameda Alliance for Health								▼
Blue Cross of California (CP)								
Blue Cross of California (GMC-North)								
Blue Cross of California (GMC-South)				▼ ▼	▲			
Blue Cross of California (Stanislaus)				▼				
Blue Cross of California (Tulare)		▼						
CalOptima		▼						▲
Central Coast Alliance for Health								
Community Health Group		▼						
Contra Costa Health Plan	▲		▲		▲	▼		
Health Net (CP)					▼	▼		
Health Net (GMC-North)					▼	▼		
Health Net (GMC-South)					▼	▼		
Health Plan of San Joaquin	▼							▲
Health Plan of San Mateo						▲ ▲		
Inland Empire Health Plan								
Kaiser (GMC-North)	▲	▲ ▲						
Kaiser (GMC-South)			▲	▲ ▼	▲	▲		▼
Kern Family Health Care								▲
L.A. Care Health Plan		▼ ▼		▼ ▼				
Maxicare	▼	▼ ▼			▼	▼ ▼		▼
Molina Medical Centers	▼	▼ ▼				▼ ▼		
Molina Medical Centers (GMC-North)								
Partnership Health Plan								
San Francisco Health Plan		▲ ▲	▲					
Santa Barbara Regional Health Authority	▲ ▲	▲ ▲			▲	▲ ▲	▲	
Santa Clara Family Health Plan					▲			
Sharp Health Plan	▼	▼ ▼	▲		▼	▼ ▼		
UCSD Health Plan	▼	▼			▲	▲		▲
Universal Care				▼		▼		
Western Health Advantage	▼							

▼ **Below MPL for 2000** ▼ **Below MPL for 2001** ▲ **Above HPL for 2000** ▲ **Above HPL for 2001**

CI =	Childhood Immunization Status Combination 1	TPC =	Timeliness of Prenatal Care
WI =	Well-Child Visits in the First 15 Months of Life	CAD =	Postpartum Care (formerly Check-ups After Delivery)
WC =	Well-Child Visits in 3rd, 4th, 5th and 6th Year of Life	DIB =	Eye Exams for People with Diabetes
WA =	Adolescent Well-Care Visits	ASM =	Use of Appropriate Medications for People with Asthma

Conclusions and Recommendations

The 2001 Medi-Cal managed care averages exceeded the NCQA 2000 national Medicaid averages on six HEDIS measures. The rates for three measures in the DHS External Accountability Set (i.e., *Childhood Immunization Status*, *Well-Child Visits in the First 15 Months of Life*, and *Eye Exams for People with Diabetes*) improved in 2001. *Well-Child Visits in the Third, Fourth, Fifth and Sixth Year of Life* rate for 2001 (56.7 percent) showed improvement over 1999 (51.7 percent), but showed very little change from the HEDIS 2000 rate (56.4 percent). *Postpartum Care* (formerly referred to as *Check-ups After Delivery*) had consistently low rates and was nearly identical for 1999, 2000, and 2001. In 2001, *Adolescent Well-Care Visit*s showed a decline of three percentage points when compared to the rate in 2000 (from 29.9 percent in 2000 to 26.9 percent in 2001).

These improvements in HEDIS rates most likely were the result of a variety of factors. Some of the potential factors that may have been responsible for improvements in the rates are as follows:

- The selection of the DHS External Accountability Set served to focus health plan efforts in specific areas of care.
- Collaborative action between the managed care plans and DHS through the establishment of an ongoing Quality Improvement Work Group (QIWG) and an Encounter Data Work Group (EDWG) fostered the sharing of ideas among health plans.
- The managed care plans have instituted various incentives for providers to increase submission of encounter data and encourage more provision of preventive care services. For example, incentives may have included providing monetary incentives for providers based on their submission of encounter data. The costs of immunizations may have been reimbursed, with an added incentive if the child received all of his or her required immunizations.
- Some managed care plans provided incentives for members who sought preventive care services. One example of these incentives included gift certificates to expectant mothers after completing a scheduled number of prenatal care visits and a follow-up visit after delivery of their newborns.
- Public reporting of the HEDIS rates for each health plan also has increased the need within the health plans to continually evaluate and improve processes and, ultimately, the HEDIS rates.
- The health plans that have decided to obtain NCQA accreditation for their Medicaid line of business have placed additional emphasis on HEDIS reporting because the accreditation scores are greatly affected by HEDIS rates.

Improvements in automated data and information systems have helped some health plans to gather data and report more efficiently. These improvements have allowed the health plans to rely more on their administrative data and have reduced the burden associated with medical record pursuit.

Some health plans are also learning from the first few years of HEDIS reporting and have implemented changes recommended to them during the audit process. These changes include:

- Better tracking of managed care members and their claims or encounters across all lines of business. This type of tracking allows a claim for a service provided while the member was in another type of health care coverage to count towards the rate, once the member has switched to Medi-Cal managed care.
- Improved medical record retrieval using a "Most Likely Provider" methodology to determine where the most pertinent information of the medical record is located. This methodology reduces costs and allows health plans to complete the medical record review in a shorter amount of time or continue to search for additional information, if needed. The health plans that have monitored and reduced the number of missing medical records typically have shown better results.
- Use of commercial software to report HEDIS rates. This has significantly reduced plans' source code issues and has allowed more time for medical record retrieval.

Based on the 2001 results, it appears that health plans have focused their quality improvement efforts on children under two years of age. This would explain the increase in the rates of well-child visits and childhood immunizations. The results indicate that the five COHS have placed more emphasis on diabetic care; thus, the rate for *Eye Exams for People with Diabetes* has shown strong improvement since 1999. Areas that might not have received this focused attention, such as *Postpartum Care*, have remained stable. These results suggest two conclusions:

1) The health plans and DHS can make a positive difference by identifying services for focused quality improvement efforts, and

2) Improvements in the rates demonstrate the capability of managed care plans to positively impact the delivery of health care services.

Health plan performance was found to be closely associated with years in operation. The analysis of the relationship between performance and the age of the health plans showed that plans in operation for more than five years achieved the highest performance rates in 2001, while those in operation for only two to three years had significantly lower rates. This suggests that it may take a number of years before new health plans are performing comparably to more mature health plans.

Recommendations to the Medi-Cal Managed Care Plans

While all of the HEDIS rates for measures in the DHS External Accountability Set increased since 1999, HSAG recommends continued efforts by the managed care plans in order to maintain improvements. Some specific recommendations that may improve health plan processes and increase HEDIS rates are as follows:

- Identify causes and factors contributing to low rates. All health plans should perform internal system-wide analyses to assess root causes and barriers in their weak performance areas. Targeted interventions can then be implemented based on the results of this analysis.
- Consider implementing delivery system strategies that result in improved HEDIS rates. The *Adolescent Well-Care Visits* measure, for example, typically has low HEDIS rates, and medical record review has not significantly increased the rates for this measure. Seventy-five percent of the members who received a well-care visit were identified using administrative data. It may prove beneficial to report this measure administratively and redirect the resources to designing better delivery systems for adolescents.
- Involve the entire managed care plan in HEDIS reporting. Departments within the health plans, such as the information systems, quality improvement, member services, provider relations, and utilization management, should be involved with HEDIS discussions to determine the best methods to capture and report HEDIS data. Several health plans have discovered, for example, that member services and utilization management captured critical elements for HEDIS reporting that the information systems and quality improvement staff did not know about until the audit process.
- Maintain and update documented policies and procedures for collecting and reporting HEDIS data. This will improve efficiency and accuracy of data collection and will provide consistency.
- Require subcontractors to provide the appropriate data needed for HEDIS reporting. Based on the audit findings, oversight of vendors for delegated functions has improved considerably. It is the primary health plan's responsibility to obtain the administrative data from the subcontracting health plan(s) or perform medical record review.
- Maintain linkages and track services across product lines for members to improve HEDIS reporting processes and resulting rates. For most health plans with more than one product line, there are members who transition between product lines (i.e., change from the Healthy Families, commercial or Medicare product to the Medi-Cal managed care program). Maintaining this link between product lines can improve administrative rates and reduce the need for medical record review.
- Track retroactive enrollment and the number of months of retro-eligibility. The retro-eligibility period is defined as the elapsed time between the actual date that the health plan became financially responsible for the member and the date that the health plan is notified of a new member. This is especially important for COHS, where retro-eligibility can extend up to 24 months. Retro-eligibility has been added as an NCQA requirement for reporting on HEDIS measures.

- Track newborns' eligibility while under the mothers' health plan membership identification. For *Well-Child Visits in the First 15 Months of Life*, newborns are typically covered under the mothers' health plan membership identification for the first two months. This is not considered retro-eligibility, and the health plans need to account for this enrollment period.
- Improve monitoring processes for claims and encounter data processing, provider data and credentialing data, medical record review, source code, and oversight of delegated functions. Health plans should perform reasonableness checks on HEDIS rates, denominators, and administrative data.
- Continue to improve and monitor encounter data submission. Health plans should monitor encounter data completeness and track submissions by provider, if necessary. This will improve the encounter data and decrease the need for medical record review.
- Use the Provider Manual (PM) -160 data, when possible, to increase rates. Several health plans collect the PM-160 data, including the individual components, but have been unable to integrate it with their system for HEDIS reporting. Quality improvement efforts that focus on incorporating these data may significantly increase the rates for several HEDIS measures (e.g., *Childhood Immunization Status* and *Well-Child Visits in the First 15 Months of Life*).
- Track and monitor missing medical records. Tracking and monitoring of missing medical records during medical record pursuit can lead to improvements in data collection processes and allow for targeted quality improvement, if needed (e.g., providers who do not submit medical records can be easily determined). Health plans should document all efforts to improve the monitoring process.
- Improve data abstraction tools. Using abstraction tools that are user-friendly can shorten the time required for medical record review and may improve results due to reductions in human error.
- Review the NCQA web site for any changes. NCQA often updates the *HEDIS Technical Specifications* throughout the year. Managed care plans should review the web site for updates and should change outdated computer programming logic, or source codes, on a regular basis.
- Explore the feasibility of using commercial HEDIS® software. Using software certified by NCQA has the added advantages of assuring that the source code is correct and excluding the source code from audit review.
- Continue to institute innovative and effective programs to encourage members and providers to achieve improvements in important clinical areas. Enhanced outreach and culturally appropriate member education programs may be necessary to improve underutilization of preventive services, especially among older children. Incentive programs and effective provider and member reminder systems have also been successful in improving delivery of preventive services.

Appendix A

Methodology

Methodology

Health Plan Methodology

The Medi-Cal managed care plans were responsible for collecting and reporting on the DHS External Accountability Set for 1999, 2000, and 2001. HSAG's responsibility included licensure as an NCQA HEDIS Compliance Audit™ organization and assuring staff members were credentialed as NCQA HEDIS Compliance auditors. HSAG was then responsible for auditing the individual health plans and producing reports based on the audit findings. The audit process followed standardized NCQA methodology and is summarized below and in Table 25 on page A-7.

Sampling

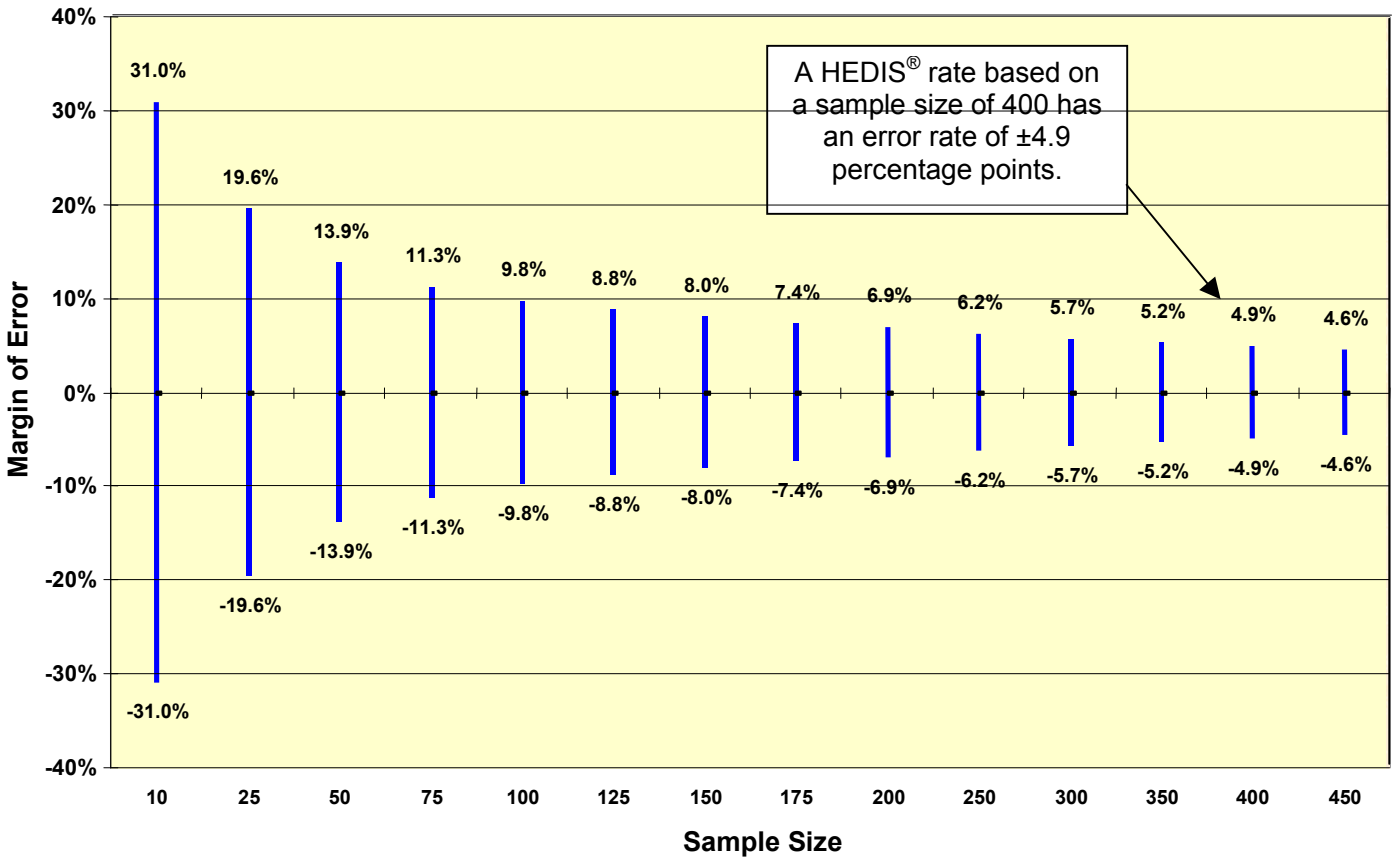
The majority of health plans utilized the systematic sampling process for the hybrid measures as outlined by NCQA in the *HEDIS 2001 Technical Specifications, Volume 2*. This process required health plans to determine the eligible members, the minimum required sample size, and an appropriate oversample. Members who were determined to be ineligible during the medical record review process were then replaced by a member from the oversample list. However, as allowed by NCQA, health plans had the option of simultaneously pursuing members on the oversample list and incorporating those members into the final sample results.

Two health plans audited by HSAG (Inland Empire Health Plan and L.A. Care Health Plan) utilized a sampling scheme other than NCQA's systematic sampling process. These health plans utilized a stratified sampling routine to ensure representation among counties or subcontractors. NCQA approved the methods and determined them to have less than a five percent margin of error.

The minimum required sample size was 411 for each hybrid measure. Health plans that had fewer than 411 eligible members for a measure were required to use the entire eligible member population for that measure. The reason for a minimum required sample size of 411 was to provide accurate results that could be extrapolated to the entire eligible population for each measure. Whenever HEDIS rates are derived from a sample of a health plan's population rather than the entire population, there is a natural margin of error associated with the results. For example, a health plan may report a rate of 60 percent for *Adolescent Well-Care Visits* based on a sample of 411 out of 30,000 eligible members. The concern is whether the 60 percent result based on the sample of 411 is the same percentage or close to the same percentage that would have been obtained if the records of all 30,000 members had been examined. In statistics, it is the convention that the range of values above and below is defined based on the results that would occur 95 times if 100 samples were drawn, rather than just one. This is called the 95 percent confidence interval (95% CI). The actual range of values above and below the reported rate (60 percent in this example) is called the sampling error (sometimes called margin of error). Figure 3, on page A-2, shows that with a sample size of 400 the sampling error is 4.9 percent. In the above example, this means that the chances are 95 out of 100 that 60 percent ±4.9 percent (55.1 percent to 64.9 percent) will contain the actual percentage of well-care visits made by the entire population of 30,000. The 60 percent may, therefore, be considered reliable and an accurate representation of the entire eligible population.

Figure 3, below, shows the margin of error associated with various sample sizes when the confidence interval is 95 percent. The margin of error is inversely related to the sample size. Large sample sizes produce smaller margins of error. When the margin of error is small, there is more confidence in the reported results. For example, using a sample size of only 50 has a margin of error of 13.9 percent, while a sample size of 400 has a margin of error of only 4.9 percent. Most scientific studies and/or surveys prefer to keep the margin of error to 5.0 percent or less. NCQA uses a standard statistical formula with less than a 5.0 percent margin of error.

Figure 3. Margin of Error Associated with the Rate Based on Various Sample Sizes (95% Confidence Interval)



Data Collection and Reporting

The Medi-Cal managed care plans had the option of using the administrative methodology or the hybrid methodology for data collection and reporting on each measure, with the exception of the asthma measure, which was an administrative-only measure. The hybrid methodology requires health plans to identify the denominator using administrative data and the numerator through both administrative data and medical record review. The denominator consists of an appropriate systematic sample of cases from the population of eligible members. The administrative method requires health plans to identify the eligible member population through administrative data, but the numerators are derived solely from the administrative data for the entire eligible population. Health plans that contract with their providers on a fee-for-service basis usually have more complete and accurate administrative data and prefer using the administrative method to reduce potential costs of medical record retrieval and abstraction.

With the exception of administrative-only measures, managed care plans are not required to use the administrative method to report on the DHS External Accountability Set, though health plans may do so for a variety of reasons. The most practical reason, however, is that reporting measures administratively is considerably less expensive than pursuing medical records. Managed care plans that chose to report measures based solely on administrative data were required to use the entire eligible population.

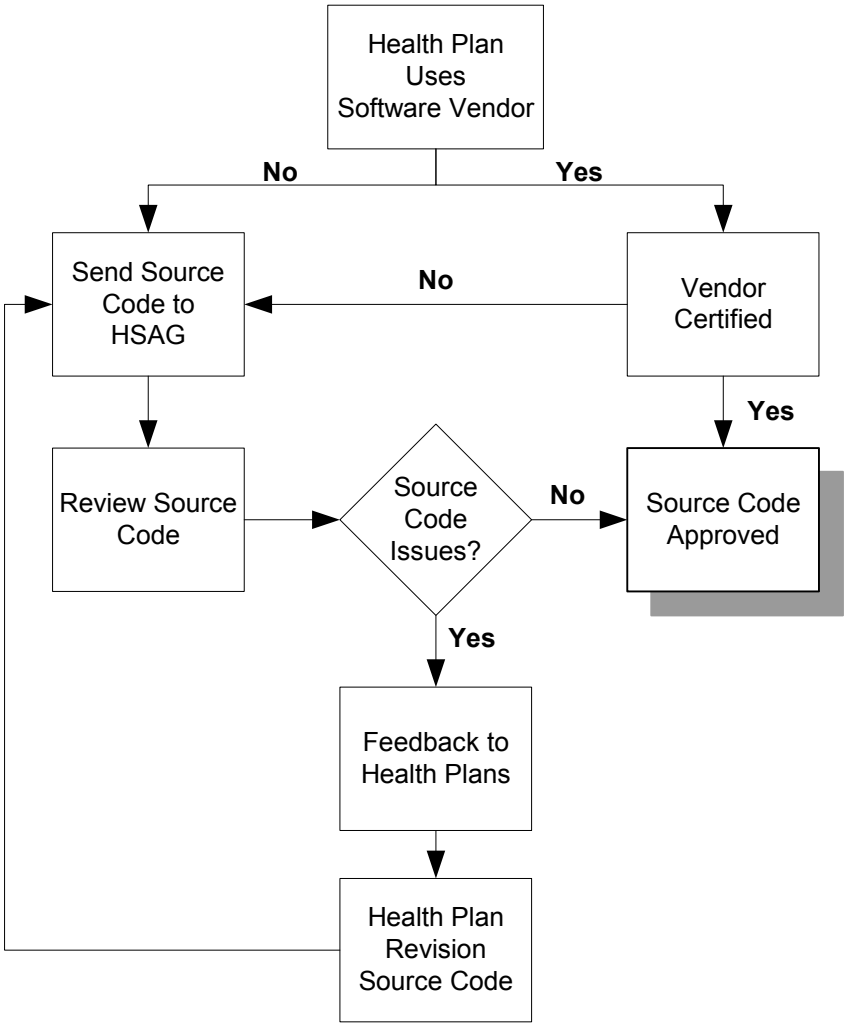
The health plans were responsible for data collection of medical record information for each hybrid measure. This responsibility extended to oversight of outside vendors contracted by the health plan to assist in medical record retrieval, abstraction, and reporting. The health plans and the vendors that performed functions related to HEDIS reporting (e.g., source code programming and data warehousing) were subjected to the auditing process, including teleconference calls, representation by the vendor while on-site at the health plan, and on-site review of the vendor, as necessary.

Each health plan was required to submit its final rates using NCQA's Data Submission Tool (DST). HEDIS measures that received an audit measure designation of NR were not included in the calculation of the Medi-Cal managed care averages. However, individual health plan rates designated as NA were included in the calculation of the overall Medi-Cal managed care averages. In addition, reportable rates that were derived using the administrative method were adjusted for comparative purposes, in accordance with NCQA methodology. The adjustment allowed for a more accurate Medi-Cal managed care average for each measure, rather than a skewed average based on a single health plan's total eligible population.

Beginning with the HEDIS 2001 reporting year, NCQA implemented a software certification program. Software vendors who passed a series of tests were certified by NCQA. The software certification program allowed auditors to spend less time on source code review and more time on other audit priorities, such as data validation. The certification program also allowed health plans to choose software vendors whose source code was already approved and, therefore, avoid delays due to source code revisions. Using a certified software vendor was not required. However, managed care plans that did not use a certified software vendor had to send their source code to HSAG or their auditor of choice for approval. HSAG reviewed the source code

for accuracy, and if any issues were discovered, the health plan received a letter detailing the issue in the source code. (A flowchart of the source code review process is included below.) The plan was then responsible for correcting and sending the revised source code back to HSAG, where the process was repeated until no issues remained. This source code review process averaged three weeks and decreased the time available for medical record retrieval for some health plans.

Figure 4. Source Code Review Process



NCQA HEDIS Compliance Audit

All of the results in this report and the processes used to obtain them met rigorous review, as specified by NCQA. Only an NCQA-licensed organization may conduct a HEDIS Compliance Audit for health plans. Each NCQA HEDIS Compliance Audit must be led by a Certified HEDIS Compliance Auditor (CHCA). HSAG, an NCQA-licensed auditing firm with eight CHCAs, conducted the audits using the standardized methodology specified in the 2001 NCQA *HEDIS Compliance Audit Standards Policies and Procedures, Volume 5*.

HSAG used a number of different methods and information sources throughout the audits. Teleconference calls proved to be a convenient mode of communication with health plan personnel and vendor representatives. These teleconferences were scheduled on an as-needed basis and served to clarify the scope of the audit as well as set timeframes for the various activities. In addition, each health plan was required to submit a completed response to the Baseline Assessment Tool (BAT) published by NCQA as *Appendix B* to *HEDIS Volume 5*. The completed BAT provided detailed information regarding the systems and processes in place at a health plan.

During the onsite review, auditors completed the following activities:

- A detailed assessment of each health plan's information systems capabilities for collecting, analyzing, and reporting HEDIS information.
- A review of the specific reporting methods used for HEDIS measures. This included: computer programming and query logic used to access and manipulate data and to calculate measures, databases and files used to store HEDIS information; medical record abstraction tools and abstraction procedures used; and any manual processes employed in the HEDIS data production and reporting.
- A review of any data collection and reporting processes supplied by vendors, contractors, or third parties, as well as the health plans' oversight of delegated functions.

In addition to the on-site reviews, HSAG reviewed computer programming used to access administrative data sets, manipulate abstracted medical record information, and calculate HEDIS rates for the performance measures. HSAG also performed a re-abstraction of a sample of medical records for at least two of the hybrid measures in the DHS External Accountability Set for each health plan and compared the results to determine if medical record abstraction was conducted accurately and in accordance with the *HEDIS 2001 Technical Specifications, Volume 2*.

Following the on-site review, corrective actions were required of some health plans for HEDIS data collection, reporting processes, and data samples. Typical corrective actions included sending additional documentation to meet audit standards, fixing computer source code logic and producing new rates, and adding additional sample cases to denominators. HSAG verified that the requested corrective actions were undertaken and that they provided final, accurate results.

The managed care plans reported the final HEDIS rates by using the DST published by NCQA. A new NCQA validation step was required for the DSTs this year. The DSTs were initially

submitted by the plans to the NCQA website and an error report was generated. This error report detailed issues in the DST (e.g., incorrect denominators and rates). The health plans then made corrections and resubmitted the DST to the NCQA website. Once the DST passed the website validation process, the plans provided the error report to HSAG. HSAG rigorously checked each DST for accuracy against the audit findings. Any discrepancies were discussed with the health plan and resolved. Most of the discrepancies were issues with filling out the DST that were not part of the validation process, and very low or very high reported rates. The latter problem was the most serious, and for some managed care plans, reported rates were determined to be biased. Rates that were significantly biased resulted in an NR audit measure designation.

Three Medi-Cal managed care plans (i.e., Blue Cross of California, Contra Costa Health Plan, and Molina Medical Centers) chose NCQA-licensed auditing firms other than HSAG. These three plans had previously established relationships with licensed auditing firms and were allowed to maintain this continuity. These managed care plans' audited results were subjected to the same NCQA standardized methodology by their auditors. The rates were provided to HSAG by DHS and are included in this report.

The NCQA audit policies and procedures require re-abstraction and comparison of the auditor's results to health plan abstraction for a selection of hybrid measures. This process completes the validation of the medical record review (MRR) process and provides an assessment of actual reviewer accuracy. In accordance with NCQA, HSAG reviewed up to 30 records identified by each health plan as meeting numerator event requirements (determined through medical record review) for measures selected for audit and MRR validation. HSAG selected a minimum of two hybrid measures for review. Sample cases were randomly selected from the entire population of MRR numerator positives identified by the health plan, as indicated on the MRR numerator listings submitted to the audit team. If the health plan reported exclusions based solely on MRR, a sample of the exclusions was over-read. If fewer than 30 medical records were found to meet numerator requirements, all records were reviewed.

For each of the validated hybrid measures, auditors determined the impact of the findings from the re-abstraction process on the health plan's final audit measure designation for each measure. The goal of the MRR validation was to determine whether the health plan made abstraction errors that significantly biased its final reported rate. When discrepancies were discovered, a second HSAG abstractor reviewed the findings for accuracy; and, if necessary, discussions with the health plan were conducted. HSAG used a statistical spreadsheet developed by NCQA to make determinations of potential bias in the final rate.

In addition to validating the medical record abstraction process, primary source verification was conducted to ensure the source code used to determine the numerators, denominators, and rates was properly executed and obtained the intended results. For each measure, this included validating member enrollment, valid exclusions (e.g., a male identified in the denominator for *Prenatal and Postpartum Care*), eligible populations, claims and encounter data, provider data, and data warehouse crosswalks. Again, any issues that were discovered and determined to potentially bias the HEDIS results were discussed with the health plan. Corrective actions to eliminate the bias (e.g, selecting additional cases or correcting source code and rerunning the

measure) were implemented by the health plans whenever possible and necessary, or the health plan received an NR for the audit measure designation.

Table 25. Timeline for Key Audit Tasks

Audit Task	Expected Timeframe
Send Baseline Assessment Tool (BAT) letter to managed care plans	As early in the process as possible
BAT from health plan due back to HSAG	February 4, 2001
Health Plan/Lead Auditor agree on on-site visit date (Note: By the on-site visit, the health plan must have created member-level data files for all measures under review and finalized all medical record review forms.)	As early in process as possible. On-site visits can occur no earlier than one month after receipt of the completed BAT
Notify DHS of on-site visit date	To be coordinated through Lead Auditor
BAT reviewed by Lead Auditor and Team Members (BAT Review Form Completed)	At least one week prior to on-site visit
Optional conference call to discuss issues related to the BAT, Source Code or Onsite Visit	At least one week prior to on-site visit
Lead Auditor sends health plan tentative agenda, negotiates timeframes and staff availability	At least one week prior to on-site visit
Source Code for all measures under the scope of the audit has been submitted and if possible, reviewed. If review has been completed, the Source Code Review Findings Form has been forwarded to the health plan	Will vary by health plan. Source code review may occur on-site if code was submitted less than two weeks prior to onsite visit. (See the Source Code Review Process flowchart on page A-4 of this Appendix)
On-site visit completed (DHS representative may accompany team onsite)	January 2001 through April 2001 (various dates)
Health plan notified of measures selected for over-read	At least three weeks after medical record data collection has begun or no later than May 25, 2001
Initial report (Follow-Up Letter) forwarded to health plan	Within two weeks of on-site visit
Health plan comments on initial report	Two weeks following health plan receipt of initial report
Lead Auditor forwards written response to comments back to health plan	Two weeks following HSAG receipt of comments from health plan
All medical records received by HSAG (Medical record review by health plan must be complete)	May 25, 2001
All requested follow-up items received	June 1, 2001
Health plan submits DST to NCQA website for validation	June 1, 2001
DST and validation error report received from health plan	June 1, 2001
Final audit report forwarded to health plan	June 8, 2001
HSAG forwards final audit report and DSTs to DHS	June 14, 2001
Health plan comment period on final report (Comments forwarded directly to DHS)	One week following health plan receipt of final report

Appendix B

Description of the HEDIS 2001 Measures

Description of the HEDIS 2001 Measures

This section provides a brief description of the numerators and denominators for the HEDIS measures in the DHS External Accountability Set. A complete description of each measure can be found in the *HEDIS 2002 Technical Specifications, Volume 2*.

Childhood Immunizations

Children who reached 24 months of age in the study period, were continuously enrolled with the health plan between 12 and 24 months of age, and had no more than one break in enrollment of up to 30 days. Rates were reported for each of the following:

- **DTP Immunization Rate at Two Years of Age**
  Numerator: At least four DTP doses by the child's second birthday

- **OPV Immunization Rate at Two Years of Age**
  Numerator: At least three OPV or IPV doses by the child's second birthday

- **MMR Immunization Rate at Two Years of Age**
  Numerator: One MMR dose between the child's first and second birthdays

- **HIB Immunization Rate at Two Years of Age**
  Numerator: Two HIB doses by the child's second birthday, with different dates of service and with at least one service date on or between the child's first and second birthdays

- **HBV Immunization Rate at Two Years of Age**
  Numerator: At least three HBV doses by the child's second birthday, with at least one service date on or between the child's sixth-month and second birthdays

- **VZV Immunization Rate at Two Years of Age**
  Numerator: At least one dose of VZV (chicken pox vaccine) with a date of service on or between the child's first and second birthdays

- **HEDIS 2001 Combination 1 (Series 4:3:1:2:3)**
  Numerator: The number of children who received the appropriate doses of DTP, OPV, MMR, HIB, and three doses of HBV by their second birthdays

- **HEDIS 2001 Combination 2 (Series 4:3:1:2:3:1)**
  Numerator: The number of children who received the appropriate doses of DTP, OPV, MMR, HIB, HBV, and VZV by their second birthdays

Well-Child Visits in the First 15 Months of Life (Six or More Visits)

This measure determines the percentage of continuously enrolled members who turned 15 months of age during 2000 and had at least six well-child visits with a primary care practitioner prior to the date they turned 15 months old. Continuous enrollment was defined as being enrolled between 31 days of life through 15 months of age, with a one-month gap of enrollment allowed.

Well-Child Visits in the Third, Fourth, Fifth and Sixth Year of Life

This measure determines the percentage of continuously enrolled members who were between three and six years of age as of December 31, 2000, and who had at least one well-child visit with a primary care practitioner during 2000. Continuous enrollment was defined as being enrolled January 2000 through December 2000, with a one-month gap of enrollment allowed.

Adolescent Well-Care Visits

This measure determines the percentage of continuously enrolled members who were between 12 and 21 years of age as of December 31, 2000, and who had at least one comprehensive adolescent well-care visit with a primary care practitioner or an obstetrician/gynecologist during 2000. Continuous enrollment was defined as being enrolled January 2000 through December 2000, with a one-month gap of enrollment allowed.

Timeliness of Prenatal Care

This measure determines the percentage of women who delivered a live birth between November 6, 1999 and November 5, 2000, were continuously enrolled in the health plan for 43 days prior to delivery through 56 days after delivery, and who received a prenatal care visit in the first trimester or within 42 days of enrollment in the health plan. *Timeliness of Prenatal Care* is a new measure that combines *Prenatal Care in the First Trimester* and *Initiation of Prenatal Care* into a single measure for HEDIS 2001.

Postpartum Care

This measure determines the percentage of women who delivered a live birth between November 6, 1999 and November 5, 2000, were continuously enrolled in the health plan for 43 days prior to delivery through 56 days after delivery, and who received a postpartum visit on or between 21 days and 56 days after delivery.

Eye Exams for People with Diabetes

This measure determines the percentage of continuously enrolled members with diabetes (Type I and Type II) between 18 and 75 years of age as of December 31, 2000, who had at least one dilated eye exam performed during 2000. Continuous enrollment was defined as being enrolled January 2000 through December 2000, with a one-month gap of enrollment allowed. Health plans used both pharmacy data and claims/encounters to identify the eligible population of diabetic members.

Use of Appropriate Medications for People with Asthma

This measure is defined as the percentage of enrolled members identified with *persistent asthma* between 5 and 56 years of age on December 31, 2000 who were continuously enrolled in the managed care plan during 1999 and 2000 (with no more than a one-month gap in coverage each year), and who received at least one dispensed prescription for inhaled corticosteroids, nedocromil, cromolyn sodium, leukotriene modifiers, or methylxanthines in 2000. The definition of *persistent asthma* is an approximation based on the pervious year's service and medication utilization rather than a clinical measure of severity.

Members were identified as having persistent asthma if any of the following occurred during 1999:

- Asthma medication was dispensed on four separate occasions;
- There was at least one emergency room visit with asthma as the principal diagnosis;
- There was at least one hospitalization with asthma as the principal diagnosis; or
- There were at least four outpatient visits with asthma listed as one of the diagnoses, in addition to at least two asthma medication-dispensing occasions.

Appendix C

Childhood Immunization Rates for Individual Antigens

Childhood Immunization Rates for Individual Antigens

For 2001, the Medi-Cal managed care average for the immunization rates for each of the individual antigens exceeded 70.0 percent, while MMR exceeded 80.0 percent. (Please see Table 26 on page C-3.) Individual immunization rates increased between 1.4 percentage points and 3.0 percentage points over the HEDIS 2000 rates, with the exception of VZV, which increased 9.3 percentage points. All of the individual immunization rates were above the NCQA 2000 national Medicaid averages.

DTP - Diphtheria, Tetanus, and Pertussis

For DTP, 73.3 percent (22 out of 30) of the reporting health plans exceeded the NCQA 2000 national Medicaid average (65.5 percent), compared to 56.7 percent of the health plans that exceeded the national average in 2000. Two health plans had rates above the NCQA 2000 national Medicaid 90th percentile of 82.5 percent, while one health plan was below the 25th percentile of 57.9 percent.

The range for DTP extended from 52.4 percent to 83.6 percent. The 2001 Medi-Cal managed care average of 70.7 percent for DTP was exceeded by 46.7 percent (or 14 out of 30) of the plans. Four health plans had DTP immunization rates above 80.0 percent. In 2000, one health plan had a DTP rate above 80.0 percent and 13 (43.3 percent) health plans were above the 67.7 percent 2000 Medi-Cal managed care average.

OPV - Oral Polio Vaccine

The OPV rate ranged from a low of 62.8 percent to a high of 90.6 percent, with a 79.0 percent overall Medi-Cal managed care average. Twenty-three health plans (76.7 percent) reported rates at or above the NCQA 2000 national Medicaid average of 74.0 percent.

Forty percent of the plans (12 out of 30) reported rates above 80.0 percent. Santa Barbara Regional Health Authority and Contra Costa Health Plan achieved an OPV immunization rate above the NCQA 2000 national Medicaid 90th percentile of 88.8 percent, while two plans had rates below the NCQA 2000 national Medicaid 25th percentile of 66.9 percent.

MMR - Mumps, Measles, and Rubella

The MMR rate is typically the highest of the individual antigens, since only one MMR immunization is required between 12 and 24 months of age. In 2000, the Medi-Cal managed care average of 81.0 percent was nearly three percentage points higher than the NCQA 2000 national Medicaid average of 78.5 percent. In 2001, the Medi-Cal managed care average for MMR was 83.1 percent and, again, MMR had the highest immunization rate for individual antigens.

The MMR rate ranged from a low of 68.1 percent to a high of 95.1 percent. The NCQA 2000 national Medicaid average of 78.5 percent for MMR was exceeded by 73.3 percent (22 out of 30) of the reporting health plans, while 56.7 percent of the health plans exceeded the 2001 Medi-Cal managed care average.

Three plans had rates above 90.0 percent and exceeded the NCQA 2000 national Medicaid 90th percentile of 89.6 percent. Two health plans reported rates slightly below the 2000 national Medicaid 25th percentile of 72.6 percent.

HIB - Haemophilus Influenza type B

In 2001, 70.0 percent (21 out of 30) of the reporting health plans exceeded the NCQA 2000 national Medicaid average of 71.1 percent for HIB, compared to 60.0 percent of the health plans that had rates above the national average in 2000.

Individually, HIB rates ranged from a low of 56.9 percent to a high of 90.2 percent. The 2001 Medi-Cal managed care average for HIB was 75.1 percent and 16 health plans, or 53.3 percent, reported rates above this average. Four health plans (13.3 percent) had rates above the NCQA 2000 national Medicaid 90th percentile of 86.5 percent, while one health was below the NCQA 2000 national Medicaid 25th percentile of 61.8 percent.

It is unclear why immunization rates for HIB, with a two-dose requirement, had a lower rate than for OPV. One possibility for the lower rate is the added HEDIS restriction that at least one of the HIB shots be given between 12 months and 24 months of age, while the three OPV doses may be given anytime prior to 24 months of age. The narrower age restriction for HIB may have made it more difficult to meet this standard.

HBV - Hepatitis B Vaccine

HBV has an added HEDIS restriction that requires at least one of the three doses be given after six months of age and prior to the child's second birthday. Nonetheless, 66.7 percent (20 out of 30) of the reporting health plans had rates above the NCQA 2000 national Medicaid average of 69.1 percent.

The HBV rate ranged from a low of 51.3 percent to a high of 88.1 percent. The 2001 Medi-Cal managed care average of 73.7 percent was exceeded by 50.0 percent (15 out of 30) of the plans. Two plans had rates above the NCQA 2000 national Medicaid 90th percentile of 86.1 percent. None were below the NCQA 2000 national Medicaid 25th percentile of 61.6 percent for HBV.

VZV - Varicella-zoster Virus (Chicken Pox)

HEDIS 2001 was the third year that VZV was a required immunization for HEDIS reporting. In the past, rates had been fairly low. This immunization has often been refused by parents who may be unaware of the potential complications that may arise from chicken pox, such as scarring and, in rare cases, meningitis, or even death. The NCQA 2000 national Medicaid average of 55.3 percent reflected the under-use of this vaccine and indicated a need for public education. Nevertheless, all 30 Medi-Cal managed care plans were above 55.3 percent, and 16 health plans (53.3 percent) were above the NCQA 2000 national Medicaid 90th percentile of 72.0 percent.

In 2000, 76.7 percent (23 out of 30) of the reporting health plans were at or above the NCQA 2000 national Medicaid average for VZV and this antigen had the lowest overall Medi-Cal managed care average (64.5 percent). The HEDIS 2000 rates by health plan ranged from a low of 31.7 percent to a high of 87.8 percent, with only eight health plans reporting rates above 70.0 percent.

The 2001 Medi-Cal managed care average for VZV was 73.8 percent. Fourteen (46.7 percent) health plans were above the 2001 Medi-Cal managed care average, with six of those exceeding 80.0 percent. With increased public education, as well as provision of this single dose immunization on the same schedule as MMR, continued increases are possible, with the rate eventually matching or being very near the MMR immunization rate.

Table 26. HEDIS 2001 Childhood Immunization Status for Individual Antigens

Medi-Cal Managed Care Plan	Sample Size	DTP %	OPV %	MMR %	HIB %	HBV %	VZV %
Alameda Alliance for Health	432	69.7	74.8	84.5	75.0	72.2	71.5
Blue Cross of California (CP)	430	74.7	83.3	87.4	77.7	78.4	77.9
Blue Cross of California (GMC-North)	432	72.0	81.0	85.2	78.5	83.6	76.6
Blue Cross of California (GMC-South)	180	59.4	67.8	78.9	65.6	67.2	70.6
Blue Cross of California (Stanislaus)	432	74.1	84.7	88.7	78.7	81.0	58.6
Blue Cross of California (Tulare)	432	67.8	79.4	84.7	68.5	73.6	75.5
CalOptima	432	69.7	77.3	85.0	75.7	73.8	80.6
Central Coast Alliance for Health	411	77.6	82.0	88.1	82.0	75.7	79.1
Community Health Group	411	74.5	76.6	87.8	78.6	64.5	81.0
Contra Costa Health Plan	411	80.3	90.0	87.8	83.7	87.8	77.9
Health Net (CP)	431	62.6	77.0	76.8	65.0	67.8	69.1
Health Net (GMC-North)	428	72.7	88.1	84.8	75.9	73.8	77.6
Health Net (GMC-South)	118	68.6	74.6	74.6	69.5	63.6	67.8
Health Plan of San Joaquin	453	64.9	77.5	85.7	73.5	72.6	71.7
Health Plan of San Mateo	429	66.0	69.7	70.9	68.8	68.8	65.3
Inland Empire Health Plan	432	64.6	73.4	86.3	75.9	69.7	72.2
Kaiser (GMC-North)	437	80.6	86.3	90.4	87.9	77.8	85.6
Kaiser (GMC-South)	102	78.4	86.3	95.1	90.2	79.4	89.2
Kern Family Health Care	432	72.2	84.7	76.6	80.6	78.7	81.9
L.A. Care Health Plan	414	67.9	77.8	79.0	72.7	73.9	70.3
Maxicare	307	52.4	62.9	68.1	61.9	65.8	69.1
Molina Medical Centers	453	62.0	79.2	81.2	71.7	68.2	66.9
Molina Medical Centers (GMC-North)	NA	NA	NA	NA	NA	NA	NA
Partnership Health Plan of California	432	73.6	79.2	82.9	75.5	72.7	74.5
San Francisco Health Plan	430	79.5	83.7	84.7	77.2	80.2	73.3
Santa Barbara Regional Health Authority	402	83.6	90.6	94.3	87.6	88.1	81.6
Santa Clara Family Health Plan	431	83.5	87.2	89.1	87.5	77.0	76.8
Sharp Health Plan	452	61.7	70.8	75.2	65.7	62.4	67.0
UCSD Health Plan	269	68.8	62.8	73.2	67.7	51.3	64.3
Universal Care	264	66.3	70.5	75.8	72.0	62.9	69.7
Western Health Advantage	383	62.4	74.2	81.5	56.9	80.2	71.5
2001 Medi-Cal Managed Care Average	**11,502**	**70.7**	**79.0**	**83.1**	**75.1**	**73.7**	**73.8**
2000 Medi-Cal Managed Care Average		**67.7**	**76.4**	**81.0**	**73.3**	**72.3**	**64.5**
NCQA 2000 National Medicaid Average		**65.5**	**74.0**	**78.5**	**71.1**	**69.1**	**55.3**

Appendix D

Summary of Audit Measure Designations and Data Collection Methods

Summary of Audit Measure Designations and Data Collection Methods

Reporting of HEDIS Rates

As discussed in the Overview section in this report (on page 5) the Medi-Cal managed care plans received an audit measure designation for each of the HEDIS measures. Table 27 summarizes the percentage of plans that produced a reportable rate for each HEDIS measure in the DHS External Accountability Set.

Table 27. Percentage of Medi-Cal Managed Care Plans Reporting for each HEDIS Measure in 2002

DHS External Accountability Set	Percent of Medi-Cal Managed Care Plans		
	Reported Rate	NA (N<30)	NR
Childhood Immunization Status (Combination 1)	96.8	3.2	0.0
Well-Child Visits in the First 15 Months of Life (Six or More Visits)	71.0	16.1	12.9
Well-Child Visits in the Third, Fourth, Fifth and Sixth Year of Life*	96.8	3.2	0.0
Adolescent Well-Care Visits	96.8	3.2	0.0
Timeliness of Prenatal Care	93.5	3.2	3.2
Postpartum Care	96.8	3.2	0.0
Use of Appropriate Medications for People with Asthma (Combined Rate)	87.1	6.5	6.5
Eye Exams for People With Diabetes*	100.0	0.0	0.0

* *Eye Exams for People with Diabetes*, the third numerator of the *Comprehensive Diabetes Care* measure, was reported by the five County Organized Health Systems (COHS) as a substitute for the *Well-Child Visits in the Third, Fourth, Fifth and Sixth Year of Life* measure. This approach was taken due to the fact that there is a significant difference in the average age of the COHS population compared to that of all other health plans, and this measure would better reflect the large number of managed care members with chronic illness in the population served by these five health plans. Please see the Managed Care Model Types section in Appendix F for more information about COHS and other managed care model types.

Based on Table 27, plans had difficulty reporting on two HEDIS measures: *Well-Child Visits in the First 15 Months of Life* and *Use of Appropriate Medications for People with Asthma*.

Only 71.0 percent (22 out of 31) of the plans were able to report a rate for *Well-Child Visits in the First 15 Months of Life.* Many plans continued to experience difficulty in reporting on this measure due to the denominator requirements (please see Appendix G – Caveats and Limitations and Appendix B – Description of the HEDIS 2001 Measures). As discussed in the Medi-Cal Managed Care Plan Results section of this report (on page 13), four plans (12.9 percent) received

NRs for this measure and five plans (16.1 percent) identified less than 30 eligible children in the denominator.

Use of Appropriate Medications for People with Asthma was a new measure for the Medi-Cal managed care plans in 2001. During the NCQA HEDIS Compliance Audits, the auditors observed difficulties in the plans' abilities to write computer-programming code for this measure and to identify the denominator due to incomplete encounter data. There were also challenges with manipulating the pharmacy data and determining the correct dispensing units according to the requirements for this measure.

Data Collection Methods

Two methods are used for reporting HEDIS measures: the administrative method and the hybrid method. The administrative method requires health plans to identify the eligible population (i.e., the denominator) using administrative data (claims and encounter data). In addition, the numerator(s), or services provided to the members in the eligible population, are derived solely from administrative data. Medical records cannot be used to retrieve information. When using the administrative method, the entire eligible population becomes the denominator and sampling is not allowed. The administrative method is cost efficient, but can produce lower rates due to a number of reasons, such as incomplete data submission by capitated providers. However, it is more cost efficient, less time consuming and less resource intensive to use the administrative method if a health plan does not have data completeness issues.

Table 28 (below) provides the distribution for numerators by data collection method. For example, of the 5,190 women who had a postpartum visit, 63.7 percent (or 3,306 women) were identified solely through administrative data.

Table 28. Data Collection Methods

DHS External Accountability Set	Total Numerator Count	Percentage of Numerators Identified by Data Collection Methods	
		Administrative	Medical Record
Childhood Immunization Status (Combination 1)	6,554	12.2	87.8
Well-Child Visits in the First 15 Months of Life (Six or More Visits)	2,050	33.8	66.2
Well-Child Visits in the Third, Fourth, Fifth and Sixth Year of Life	6,079	81.8	18.2
Adolescent Well-Care Visits	3,465	77.6	22.4
Timeliness of Prenatal Care	7,345	59.7	40.3
Postpartum Care	5,190	63.7	36.3
Use of Appropriate Medications for People with Asthma (Combined Rate)*	NA	NA	NA
Eye Exams for People With Diabetes	1,232	63.1	36.9
Total for all Measures	**31,915**	**55.2**	**44.8**

* Use of *Appropriate Medications for People with Asthma* requires the use of the Administrative method.

Overall, 55.2 percent of the services provided were captured in the administrative data for the plans. Conversely, 44.8 percent was not in the administrative data and required medical record review.

Only 12.2 percent of the childhood immunizations were found by using the administrative data. This indicates that, at the time of this report, data completeness continued to be an issue for childhood immunizations.

Two measures, *Well-Child Visits in the Third, Fourth, Fifth and Sixth Year of Life* and *Adolescent Well-Care Visits* had relatively high administrative rates. These two measures require only one visit to qualify as a positive numerator, and consequently, the administrative encounter data was mostly complete for these services.

Appendix E

Quality Improvement Efforts Among Medi-Cal Managed Care Plans

Quality Improvement Efforts Among Medi-Cal Managed Care Plans

Individually, some Medi-Cal managed care plans showed significant increases in their HEDIS rates between 2000 and 2001. The table below provides a summary of the self-reported quality improvement efforts among the plans that may have had an impact on increasing their HEDIS rates.

Table 29. Quality Improvement Efforts Among Medi-Cal Managed Care Plans Whose HEDIS Rates Improved Between 2000 and 2001

Medi-Cal Managed Care Plan	HEDIS Rate (%) 2000	2001	Quality Improvement Efforts at the Medi-Cal Managed Care Plan
Childhood Immunizations Combination 1 HPL = 69.3 MPL = 41.8			
Kaiser GMC-North	58.9	70.3 Above HPL	The frequency of childhood immunization outreach was increased from quarterly to six times per year. Lists of children needing immunizations were sent to the facility contacts every two months. Facilities used the list to contact parents. Whenever a member came to a facility, needed services, including immunizations, were printed directly on the intake form.
Contra Costa Health Plan	62.3	70.3 Above HPL	Contra Costa Health Plan received the registry data and downloaded it into its HEDIS warehouse. The plan also built a user interface from its claims payment system to the registry. Immunizations that came in on the PM-160 form were used to update the immunization registry. The registry was then used to send automatic reminders to parents for immunizations. Childhood Immunizations were also the focus of one of the Internal Quality Improvement Projects (IQIPs) for Contra Costa Health Plan.
Central Coast Alliance for Health	56.5	64.0	Central Coast Alliance for Health increased its staff, including creating a Quality Improvement manager. Staff also had increased experience for collecting and reporting HEDIS data.
Santa Clara Family Health Plan	52.1	61.0	Started sending postcards to parents for children at 12 and 18 months of age. Obtained immunization registry data. Intensified pursuit of medical records.
Community Health Group	54.0	60.1	Increased provider education. Improved process for collecting encounter data, including providing incentives to providers.
Partnership Health Plan	49.5	58.8	Conducted some provider education. Published HEDIS rates in the newsletter for both members and providers and shared best practices.
L.A. Care Health Plan	46.4	54.8	L.A. Care Health Plan has contracts with several other plans to provide services to its members. L.A. Care Health Plan worked to improve the encounter data submission from its plan partners by providing financial incentives.
Molina Medical Centers (CP)	39.7	53.6	A welcome call was conducted for every managed care member and the member was assisted with getting an appointment to see a primary care practitioner. Gifts certificates were issued for children who had all their immunizations. Data collection process was improved.
Health Plan of San Joaquin	41.0	50.8	Increased provider awareness and education about recommended childhood immunizations and the importance of HEDIS reporting.
Sharp Health Plan	27.6	45.8	Increased provider education and improved encounter data submission. Sent newsletter discussing importance of HEDIS and the need for managed care members to get recommended services.

Medi-Cal Managed Care Plan	HEDIS Rate (%) 2000	2001	Quality Improvement Efforts at the Medi-Cal Managed Care Plan
Well-Child Visits in the First 15 Months of Life HPL = 57.9 MPL = 18.1			
Central Coast Alliance for Health	49.5	56.7	Increased experience for collecting and reporting HEDIS data. Increased staff, including creating a Quality Improvement manager position.
Blue Cross of California (Stanislaus)	23.1	45.2	This was the second year of reporting HEDIS for the Blue Cross of California (Stanislaus) contract. Rate increases were attributed to increased experience with collecting and reporting on the HEDIS measures.
Contra Costa Health Plan	21.4	34.8	An automatic reminder was sent to parents to inform them when their child was due for a well-child visit. Contra Costa saw as much as a 60 percent response from parents scheduling well-child visits, though this rate tapered off to around 40 percent as of the time of this report.
Partnership Health Plan	21.6	32.6	Conducted some provider education. Published HEDIS rates in the newsletter for both members and providers and shared best practices.
Community Health Group	0.0 Below MPL	25.2	Increased provider education. Improved process for collecting encounter data, including providing incentives to providers. Sent mail to members to remind them of needed well-child visits.
Well-Child Visits in the Third, Fourth, Fifth and Sixth Year of Life HPL = 68.2 MPL = 38.9			
Sharp Health Plan	55.1	79.0 Above HPL	Increased provider education and improved encounter data submission. Sent newsletter to members discussing importance of HEDIS and the need for members to get recommended services.
San Francisco Health Plan	57.4	68.6 Above HPL	Increase was attributed to greater awareness among providers about HEDIS measures and requirements.
Community Health Group	58.6	66.9	Rate increase was thought to be the result of increased provider education and improved processes for collecting encounter data, including providing incentives to providers. Sent mail to members to remind them of needed well-child visits.
Inland Empire Health Plan	52.0	61.1	Created a provider incentive program that gave providers additional fees for well-child visits, but required submission of an encounter form.
Blue Cross of California (Stanislaus)	47.2	54.1	This was the second year of reporting HEDIS for the Blue Cross of California (Stanislaus) contract. Increase in the plan's rates was attributed to increased experience with collecting and reporting on the HEDIS measures.
Universal Care	43.1	51.6	Universal Care had a substantial increase in administrative data for well-child visits (113 administrative positive cases in 2001 verses only 49 in 2000). This indicates better encounter data submission for this type of service.
L.A. Care Health Plan	40.5	47.5	L.A. Care Health Plan has contracts with several other plans to provide services to its members. L.A. Care Health Plan worked to improve the encounter data submission from its plan partners by providing financial incentives.
Adolescent Well Care Visits HPL = 44.4 MPL = 19.3			
Partnership Health Plan	27.3	35.6	Conducted some provider education. Published HEDIS rates in the newsletter for both members and providers and shared best practices.

Medi-Cal Managed Care Plan	HEDIS Rate (%) 2000	2001	Quality Improvement Efforts at the Medi-Cal Managed Care Plan
Postpartum Care HPL = 61.0 MPL = 34.5			
Santa Barbara Regional Health Authority	71.4 Above HPL	74.9 Above HPL	Utilization Management identified pregnant members for monitoring purposes. The hospitals notified Santa Barbara Regional Health Authority when a member was admitted, and a nurse from the plan went to the hospital to meet with the mother and discuss postpartum care. Postcards with the actual date range of when a postpartum visit was needed were then sent to the member and her provider as a reminder.
CalOptima	44.5	52.7	The CalOptima Prenatal Support Service staff designed a form that included all elements necessary for documentation of a positive postpartum exam. The forms were distributed to OB physician offices. Providers and office staff were educated on HEDIS standards. The plan started an incentive program (gift certificates) for women who had postpartum care visits. CalOptima mailed a letter to all pregnant women in the third trimester educating them on the importance of the postpartum exam. A coupon was enclosed that had to be signed by a physician indicating the exam was completed and returned to CalOptima, at which time a gift certificate was mailed to the member. A reminder letter was also designed for the provider offices. The letter gave the member the date of the scheduled postpartum appointment and advised the importance of keeping the appointment. Prior results showed a written reminder worked better than phone calls.
Inland Empire Health Plan	40.7	50.0	In December 2000, Inland Empire Health Plan started a High Risk OB Program. Nearly 75 percent of all pregnant women enrolled in Inland Empire Health Plan qualified for this outreach program.
Blue Cross of California GMC-South	41.4	48.9	There was a prenatal outreach program in place and an IQIP on Breastfeeding that may have contributed to the increase in the rate. However, this was the second year of reporting HEDIS for the Blue Cross of California GMC-South contract. The increase in rates was also attributed to increased experience with collecting and reporting on the HEDIS measures.
Community Health Group	34.8	46.7	Increased provider education. Improved process for collecting encounter data, including providing incentives to providers.
Contra Costa Health Plan	33.0 Below MPL	45.7	Began using the hybrid method to report postpartum visits.
Sharp Health Plan	20.2 Below MPL	34.2 Below MPL	Increased provider education and improved encounter data submission. Sent newsletter to members discussing importance of HEDIS and the need for members to get recommended services.
Molina Medical Centers (CP)	15.3 Below MPL	26.2 Below MPL	Started a “Motherhood Matters” program. All pregnant members were given a car seat and were eligible to receive gifts. Improved data collection process.

Medi-Cal Managed Care Plan	HEDIS Rate (%) 2000	2001	Quality Improvement Efforts at the Medi-Cal Managed Care Plan
Eye Exams for People With Diabetes **HPL = 61.1 MPL = 26.6**			
Santa Barbara Regional Health Authority	68.7 Above HPL	75.4 Above HPL	Reports were sent to the high volume providers each month showing rates for the various HEDIS indicators for diabetes. A nurse in charge of this process then met with low performing providers on a quarterly basis. Financial incentives were given to providers for completing tests on diabetic members and for showing improvement in outcomes, such as lower HbA1c levels in these members. Diabetes was also an IQIP for Santa Barbara Regional Health Authority.
Central Coast Alliance for Health	29.4	54.5	Increased experience for collecting and reporting HEDIS data. Increased staff, including creating a Quality Improvement manager position.

Appendix F

Results for Medi-Cal Managed Care Model Types

Results for Medi-Cal Managed Care Model Types

Medi-Cal Managed Care Model Types

The Medi-Cal managed care plans are categorized under three managed care model types: County Organized Health System (COHS), the Two-Plan Model—which includes Commercial Plans (CPs) and Local Initiatives (LIs)—and Geographic Managed Care (GMC) health plans. A brief description of each managed care model type is presented below.

County Organized Health Systems (COHS) Health Plans

A COHS is an agency organized and operated by the county with representation from providers, members, local government, and other interested parties. A COHS contracts with the Medi-Cal managed care program to cover virtually all the Medi-Cal beneficiaries within the county. Members have a wide choice of managed care providers, but do not have the option of obtaining services under the fee-for-service system unless authorized by the plan.

For this reporting period, there were five COHS operating in seven counties: San Mateo, Santa Barbara, Orange, Santa Cruz, Monterey, Solano and Napa. The COHS model has been in existence longer than the other managed care models. At the time of this report, all COHS had been in operation a minimum of five years with an average of ten years in operation.

Table 30. COHS Health Plans

Start of Operation	Medi-Cal Managed Care Health Plan	Counties Covered	Number of Health Plan Members as of January 2000
10/95	CalOptima	Orange	218,430
01/96	Central Coast Alliance for Health	Santa Cruz, Monterey	62,415
12/87	Health Plan of San Mateo	San Mateo	40,620
05/94	Partnership Health Plan of California	Napa, Solano	50,377
09/83	Santa Barbara Regional Health Authority	Santa Barbara	40,260

Two-Plan Model

The Two-Plan Model is the principal Medi-Cal managed care model in California. In each county designated for this model, two health plans cover the entire Temporary Assistance to Needy Families (TANF)-linked population in the county. DHS contracts with one Commercial Plan (CP) and one locally developed comprehensive managed care system called a Local

Initiative (LI). Both the CPs and the LIs are Knox-Keene licensed health plans. The LIs were developed by local community leaders who had flexibility in designing a health plan that would best meet the needs of the community it would serve. The CP was selected through a competitive bidding process. The presence of a commercial plan ensures that members are able to select a health plan that also provides care to privately insured individuals. This is consistent with the expressed intent of the California Legislature. As of this reporting period, the average number of years in operation for the CPs was 3.7 years and 4.2 years for the LIs.

Table 31. Two-Plan Models (CPs and LIs)

Start of Operation	Medi-Cal Managed Care Health Plan	Model Type	Counties Covered	Number of Health Plan Members as of January 2000
02/96	Blue Cross of California	CP	Alameda, Contra Costa, Fresno, Kern, San Francisco, Santa Clara, San Joaquin	220,183
07/97	Health Net	CP	Los Angeles, Fresno, Tulare	437,664
03/99	Molina Medical Centers	CP	Riverside, San Bernardino	47,172
01/96	Alameda Alliance for Health	LI	Alameda	77,924
10/97	Blue Cross of California	LI	Stanislaus	24,760
03/99	Blue Cross of California	LI	Tulare	25,560
02/97	Contra Costa Health Plan	LI	Contra Costa	33,804
02/96	Health Plan of San Joaquin	LI	San Joaquin	51,058
09/96	Inland Empire Health Plan	LI	Riverside, San Bernardino	181,153
07/96	Kern Family Health Care	LI	Kern	46,618
04/97	L.A. Care Health Plan	LI	Los Angeles	622,520
01/97	San Francisco Health Plan	LI	San Francisco	22,071
02/97	Santa Clara Family Health Plan	LI	Santa Clara	39,562

Geographic Managed Care (GMC) Health Plans

Under this model, DHS contracts with multiple health plans to cover the entire TANF-linked population in the county on a mandatory enrollment basis. Beneficiaries have the option to choose from multiple commercial managed care plans for health care services. The initial GMC program was implemented in Sacramento County in 1994 and included six health plans. The second GMC program was implemented in San Diego County in 1998 and included seven participating health plans.

For purposes of this report, the Sacramento GMC health plans are referred to as GMC-North; San Diego plans are referred to as GMC-South. At the time of this HEDIS study, the six health plans composing GMC-North, with the exception of Molina Medical Centers, had been in operation for at least five years, while the seven health plans in GMC-South had been in operation for three years.

Table 32. GMC Health Plans

Start of Operation	Medi-Cal Managed Care Health Plan	Model Type	Counties Covered	Number of Health Plan Members as of January 2000
04/94	Blue Cross of California	GMC-North	Sacramento	53,574
04/96	Health Net	GMC-North	Sacramento	26,745
04/94	Kaiser Foundation Health Plan, Inc.	GMC-North	Sacramento	19,414
04/94	Maxicare	GMC-North	Sacramento	19,753
01/00	Molina Medical Centers	GMC-North	Sacramento	NA
05/97	Western Health Advantage	GMC-North	Sacramento	15,367
08/98	Blue Cross of California	GMC-South	San Diego	11,022
08/98	Community Health Group	GMC-South	San Diego	68,631
08/98	Health Net	GMC-South	San Diego	6,766
08/98	Kaiser Foundation Health Plan, Inc.	GMC-South	San Diego	7,597
08/98	Sharp Health Plan	GMC-South	San Diego	45,814
08/98	University of California, San Diego (UCSD) Health Plan	GMC-South	San Diego	12,989
08/98	Universal Care	GMC-South	San Diego	12,181

Results

The results by model type are summarized below and presented graphically. For purposes of this report, the GMC model has been divided into GMC-North and GMC-South This was necessary for appropriate comparisons between regions and measurement years. As the managed care plans in the GMC-South did not participate in the HEDIS 1999 audit process, there were no comparable scores for those health plans.

When available, the NCQA 2000 national Medicaid averages have been displayed in the graphs to allow for meaningful comparisons of results. The NCQA 2000 national Medicaid averages were calculated using data from Medicaid health plans across the United States for the 1999 measurement year.

Since the Medi-Cal managed care model types are made up of individual health plans, the increases and decreases in the rates were addressed in previous sections, under the heading of Medi-Cal Managed Care Plan Results.

In terms of performance, analyses showed that one of the most important characteristics of the managed care model types is the length of time they have been in operation. Performance of any managed care model type is closely associated with its maturity (Spearman's rank = 0.9, p-value < 0.05). Table 33, below, illustrates this association.

Table 33. Relationship Between Performance and Average Years in Operation of Model Type

	Average Years in Operation	2001 Performance
COHS	10.0	57.6
GMC		
GMC-North	5.4	47.5
GMC-South	3.0	46.2
Two-Plan		
LI	4.2	49.8
CP	3.7	46.1

These data suggest that performance differences among the managed care model types may have been due to the average years in operation of each managed care model type.

The performance differences among these three groups were highly statistically significant (F=8.8, p-value < 0.01) suggesting that it may take a number of years before new health plans perform comparably to those health plans that have been in operation longer. Likely reasons for improved performance as health plans mature include:

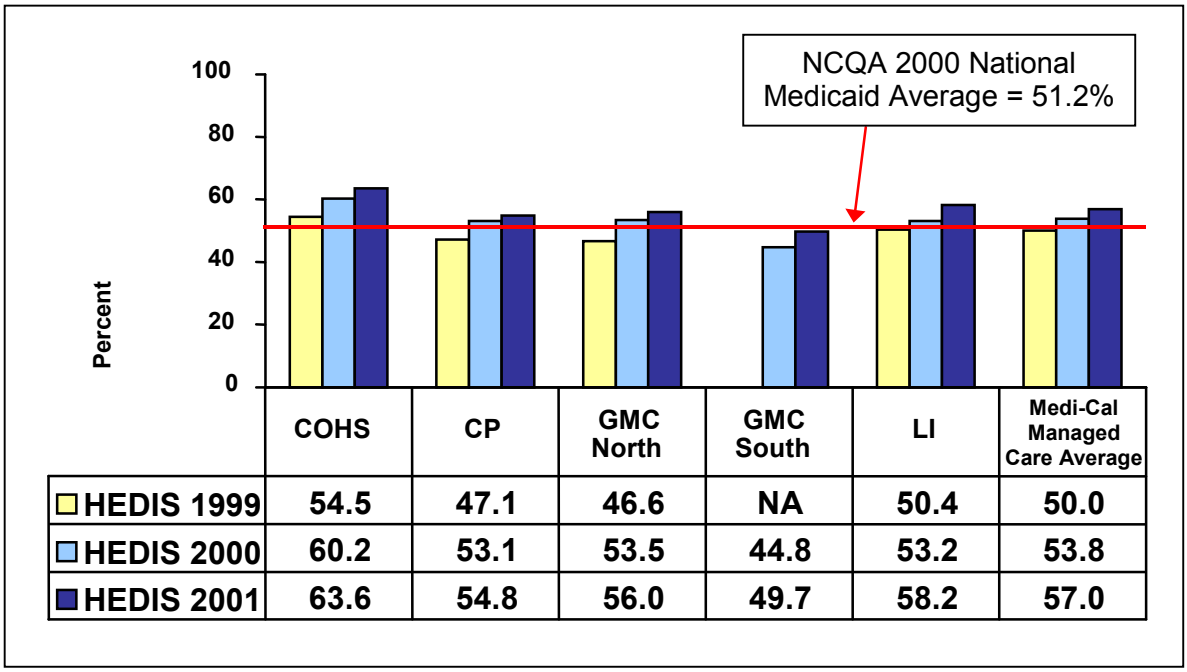
- Mature plans may have a more stable member population, permitting primary care physicians to provide preventive care services on a more regular basis to those members.
- Providers are more knowledgeable about HEDIS requirements.
- More mature plans have improved data collection and reporting systems in place.
- Established health plans are more likely to have developed programs such as outreach, education, and incentive programs that result in improved HEDIS performance.

The strong relationship between length of time in operation and managed care plan performance did not appear to be related to profit status. The average difference in age between the ten for-profit health plans had not dropped in 2001; the 20 not-for-profit health plans' difference in age was small, about 11 months (4.4 years versus 5.3 years, respectively). The overall performance of not-for-profits was 58.0 percent, while that of for-profits was 50.7 percent. This difference was not statistically significant.

Childhood Immunization Status

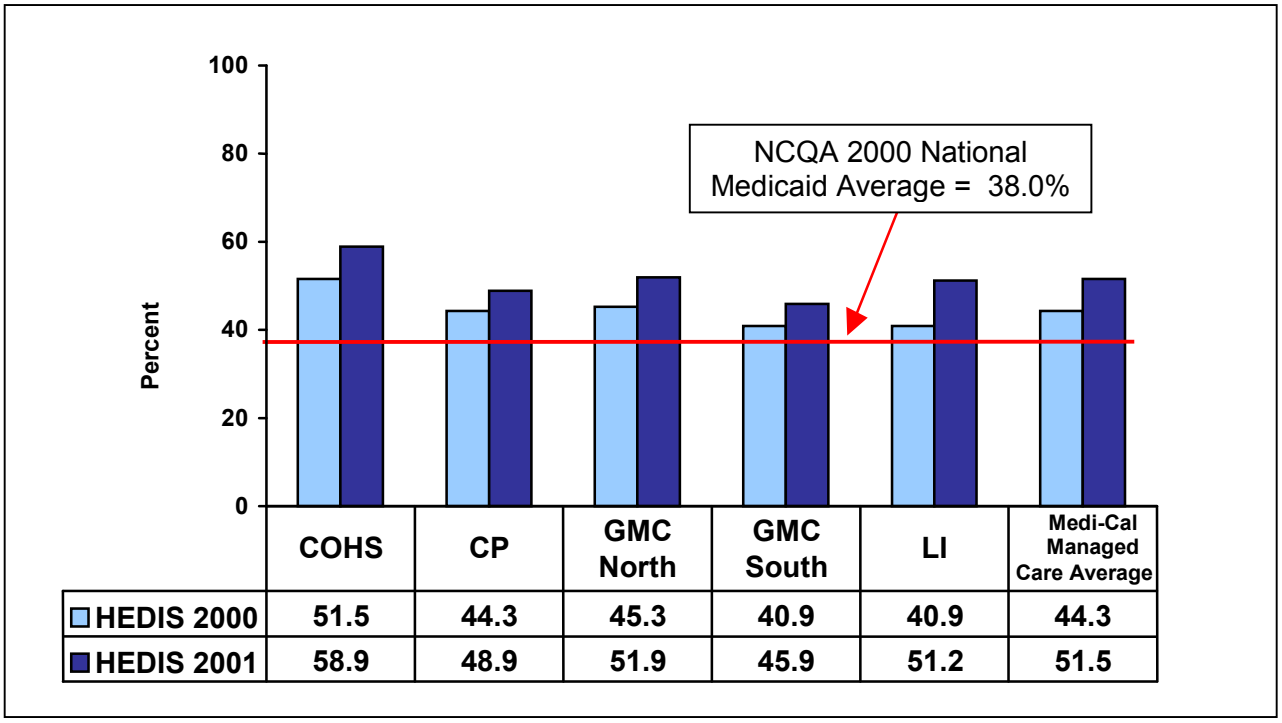
Assessment of the *Childhood Immunization Status Combination 1* (4:3:1:2:3 series) is displayed in the graph below (Figure 5). This rate has steadily increased each year and has improved seven percentage points (or 14.0 percent) since 1999. All managed care model types, with the exception of GMC-South (49.7 percent), exceeded the NCQA 2000 national Medicaid average of 51.2 percent.

Figure 5. Childhood Immunization Status Combination 1 (4:3:1:2:3 Series)



	COHS	CP	GMC North	GMC South	LI	Medi-Cal Managed Care Average
HEDIS 1999	54.5	47.1	46.6	NA	50.4	50.0
HEDIS 2000	60.2	53.1	53.5	44.8	53.2	53.8
HEDIS 2001	63.6	54.8	56.0	49.7	58.2	57.0

Figure 6. Childhood Immunization Status Combination 2 (4:3:1:2:3:1 Series)



	COHS	CP	GMC North	GMC South	LI	Medi-Cal Managed Care Average
HEDIS 2000	51.5	44.3	45.3	40.9	40.9	44.3
HEDIS 2001	58.9	48.9	51.9	45.9	51.2	51.5

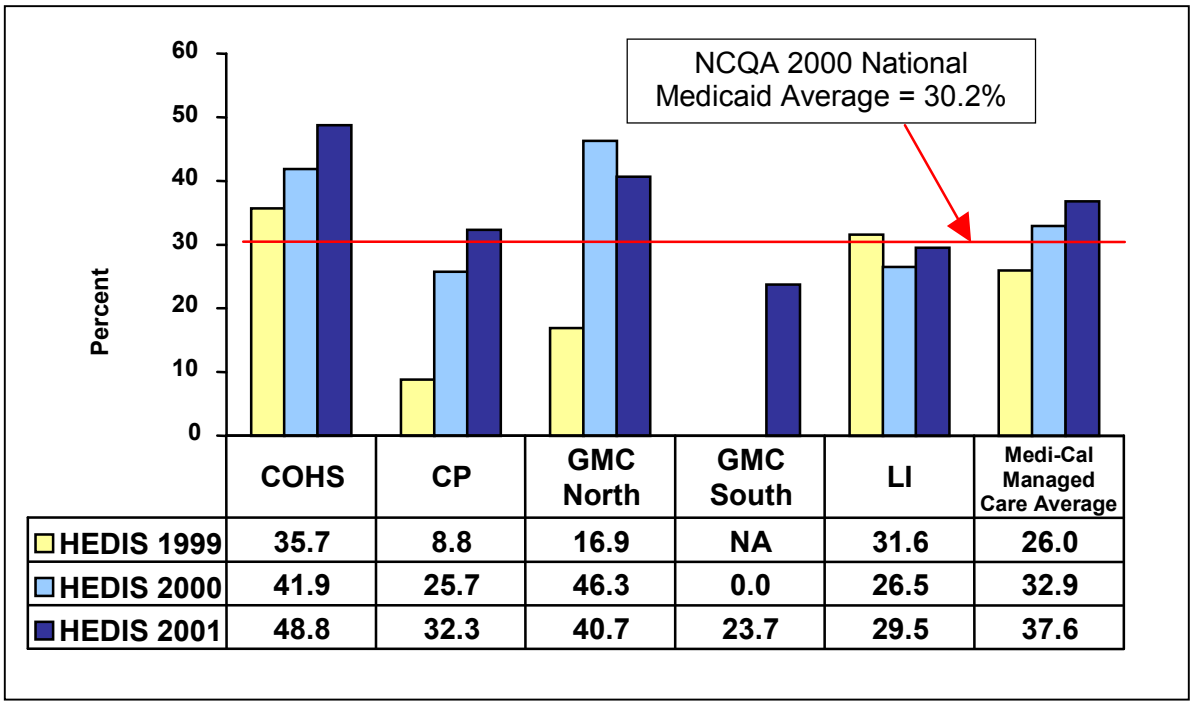
In 2000 and again in 2001, all of the managed care model types reported rates above the NCQA 2000 national Medicaid average of 38.0 percent for *Childhood Immunization Status Combination 2*. In addition, all of the rates for 2001 improved between 4.6 percentage points to 10.3 percentage points over 2000. The COHS reported the highest rate at 58.9 percent. While the LIs had the largest increase, from 40.9 percent in 2000 to 51.2 percent in 2001. The overall Medi-Cal managed care average was 51.5 percent, or 13.5 percentage points higher than the NCQA 2000 national Medicaid average of 38.0 percent.

Well-Child Visits in the First 15 Months of Life (Six or More Visits)

The 2000 Medi-Cal managed care average of 32.9 percent was above the NCQA 2000 national Medicaid average of 30.2 percent. In 2001, the Medi-Cal managed care average increased another 4.7 percentage points to 37.6 percent. The COHS, however, showed a remarkable 48.8 percent rate for six or more *Well-Child Visits in the First 15 Months of Life*. The CPs, which ranked last in both 1999 and 2000, reported the third highest rate (32.3 percent) and, for the first time, exceeded the NCQA 2000 national Medicaid average.

For the majority of health plans in the GMC-South, 2001 was the first year they could report on this measure. GMC-South's rate of 23.7 percent was lower than the other managed care model types, but not substantially different than the rates reported by the other managed care model types in 1999 and 2000. As these plans gain experience, improvement in the 2002 rates for GMC-South is expected, which should result in an even higher overall Medi-Cal managed care average.

Figure 7. Well-Child Visits in the First 15 Months of Life (Six or More Visits)

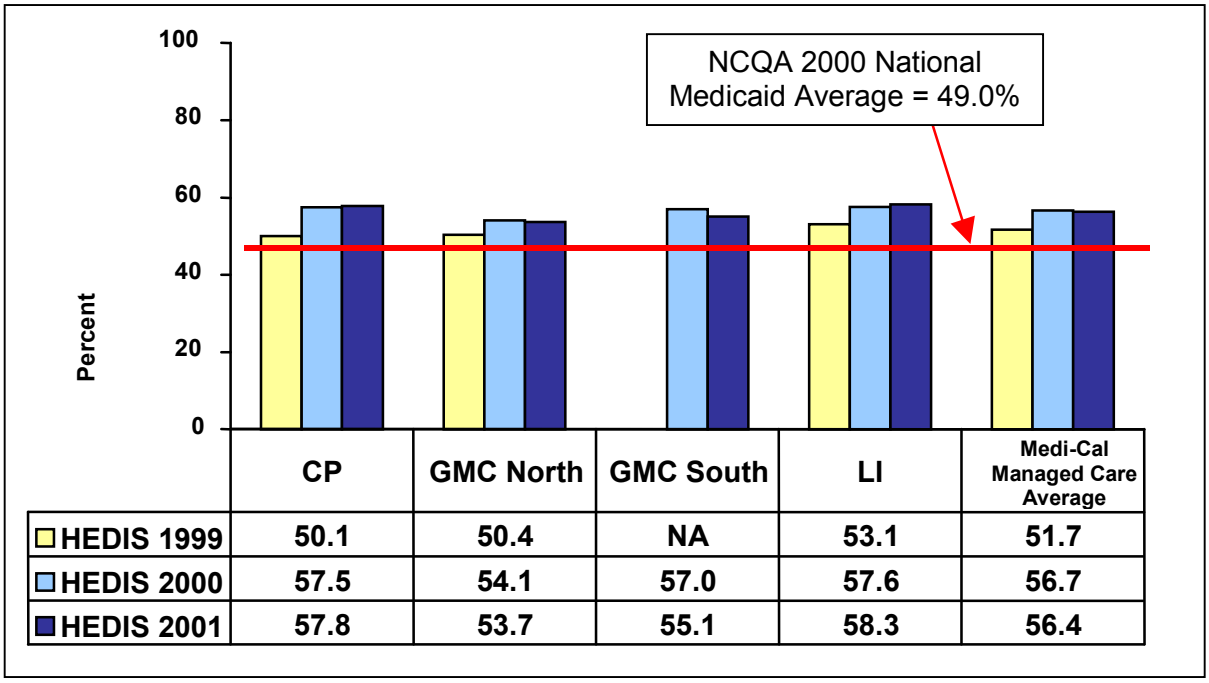


	COHS	CP	GMC North	GMC South	LI	Medi-Cal Managed Care Average
HEDIS 1999	35.7	8.8	16.9	NA	31.6	26.0
HEDIS 2000	41.9	25.7	46.3	0.0	26.5	32.9
HEDIS 2001	48.8	32.3	40.7	23.7	29.5	37.6

Well-Child Visits in the Third, Fourth, Fifth and Sixth Year of Life

The 2001 overall results by managed care model type for *Well-Child Visits in the Third, Fourth, Fifth and Sixth Year of Life* showed no statistical difference between the various managed care model types. All of the rates were similar to those reported in 2000 and all managed care model types exceeded the NCQA 2000 national Medicaid average of 49.0 percent. The COHS did not report on the *Well-Child Visits in the Third, Fourth, Fifth and Sixth Year of Life* performance measure.

Figure 8. Well-Child Visits in the Third, Fourth, Fifth and Sixth Year of Life

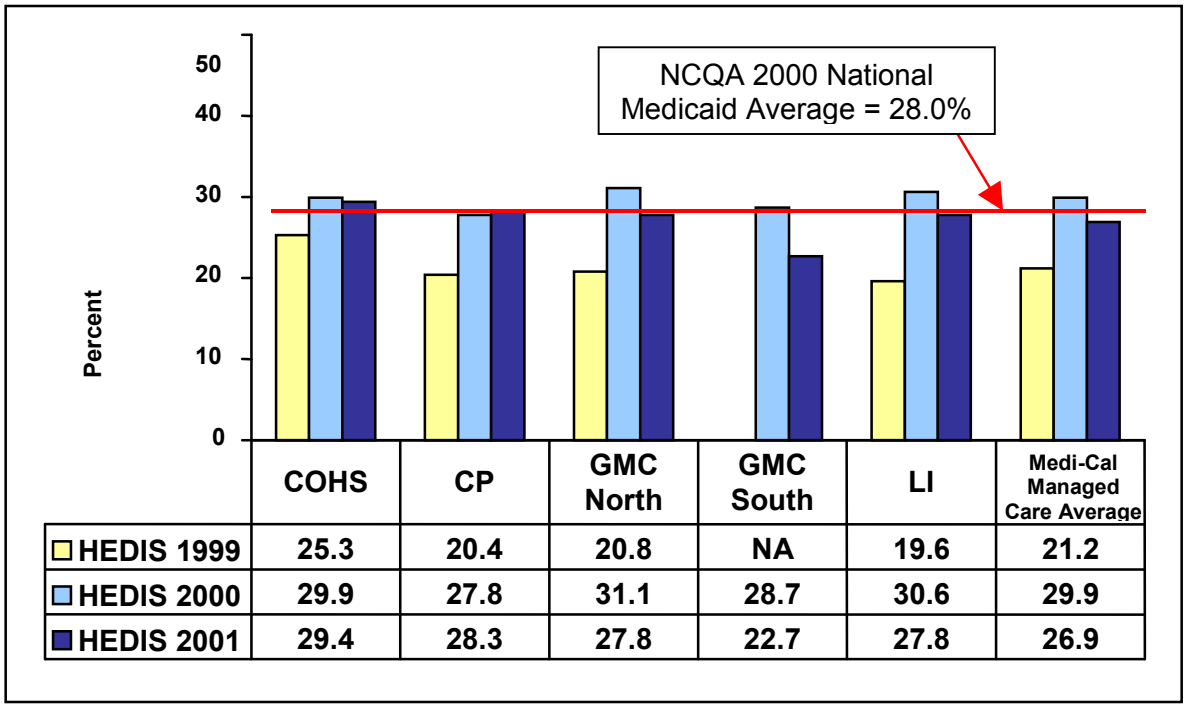


	CP	GMC North	GMC South	LI	Medi-Cal Managed Care Average
HEDIS 1999	50.1	50.4	NA	53.1	51.7
HEDIS 2000	57.5	54.1	57.0	57.6	56.7
HEDIS 2001	57.8	53.7	55.1	58.3	56.4

Adolescent Well-Care Visits

In 2000, *Adolescent Well-Care Visit*s had the highest increase in rates across the managed care model types. In 2001, the rate for this measure declined three percentage points to an overall 26.9 percent and fell below the NCQA 2000 national Medicaid average of 28.0 percent. The largest decline was seen in the GMC-South managed care plans which fell six percentage points from 28.7 percent in 2000 to 22.7 percent for 2001.

Figure 9. Adolescent Well-Care Visits

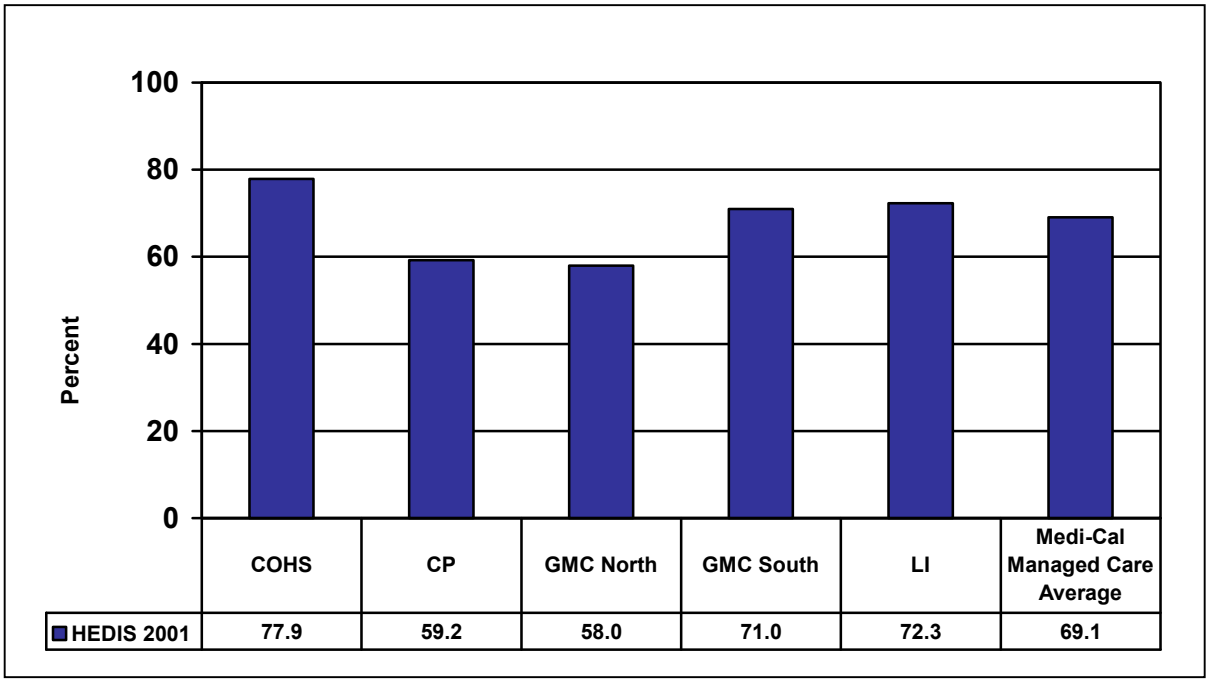


	COHS	CP	GMC North	GMC South	LI	Medi-Cal Managed Care Average
HEDIS 1999	25.3	20.4	20.8	NA	19.6	21.2
HEDIS 2000	29.9	27.8	31.1	28.7	30.6	29.9
HEDIS 2001	29.4	28.3	27.8	22.7	27.8	26.9

Timeliness of Prenatal Care

The rates for *Timeliness of Prenatal Care* ranged from 58.0 percent to 77.9 percent. All of the rates were above the MPL of 46.0 percent, but were below the HPL of 79.5 percent.

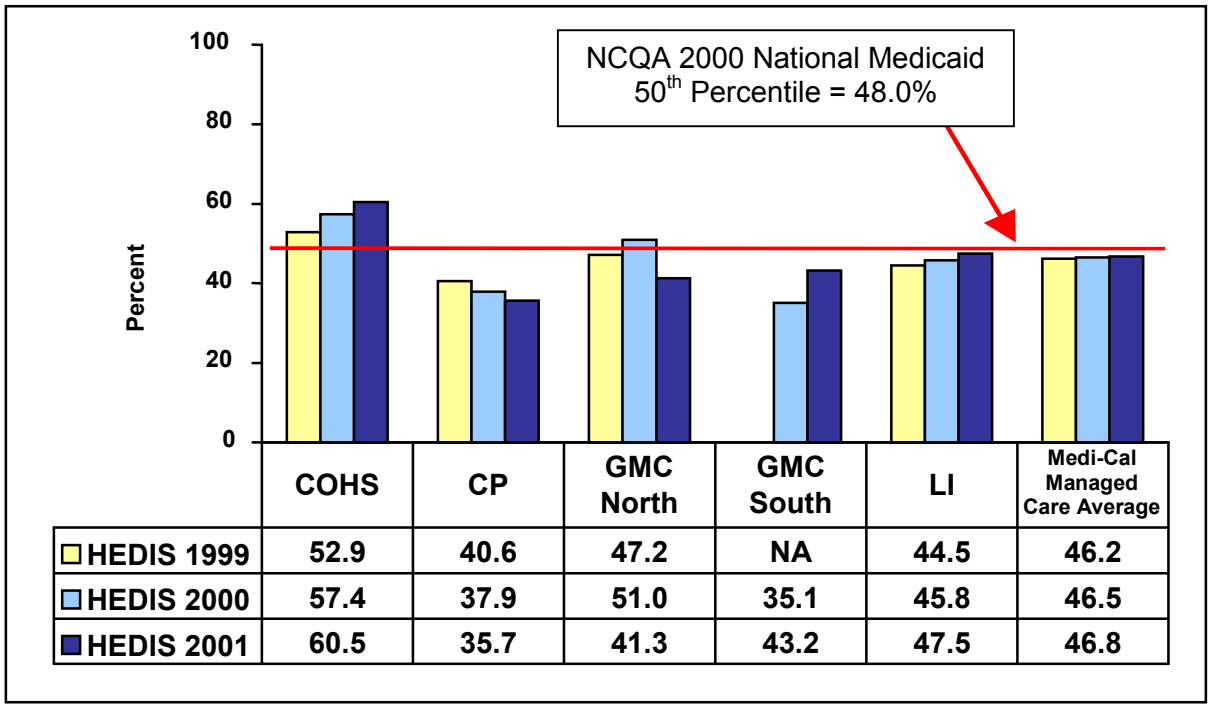
Figure 10. Timeliness of Prenatal Care



Postpartum Care (formerly Check-ups After Delivery)

The overall Medi-Cal managed care average for *Postpartum Care* remained relatively constant from 1999 to 2001. For HEDIS 2001, the NCQA 2000 national Medicaid 50th percentile of 48.0 percent was exceeded only by the COHS (60.5 percent). The COHS continued to have the highest rates for this measure and have shown increases each year. By contrast, the CPs had a small decline in their rate for the second year in a row and reported the lowest rate at 35.7 percent. All of the managed care rates were above the MPL of 34.5 percent, but were below the HPL of 61.0 percent.

Figure 11. Postpartum Care



	COHS	CP	GMC North	GMC South	LI	Medi-Cal Managed Care Average
HEDIS 1999	52.9	40.6	47.2	NA	44.5	46.2
HEDIS 2000	57.4	37.9	51.0	35.1	45.8	46.5
HEDIS 2001	60.5	35.7	41.3	43.2	47.5	46.8

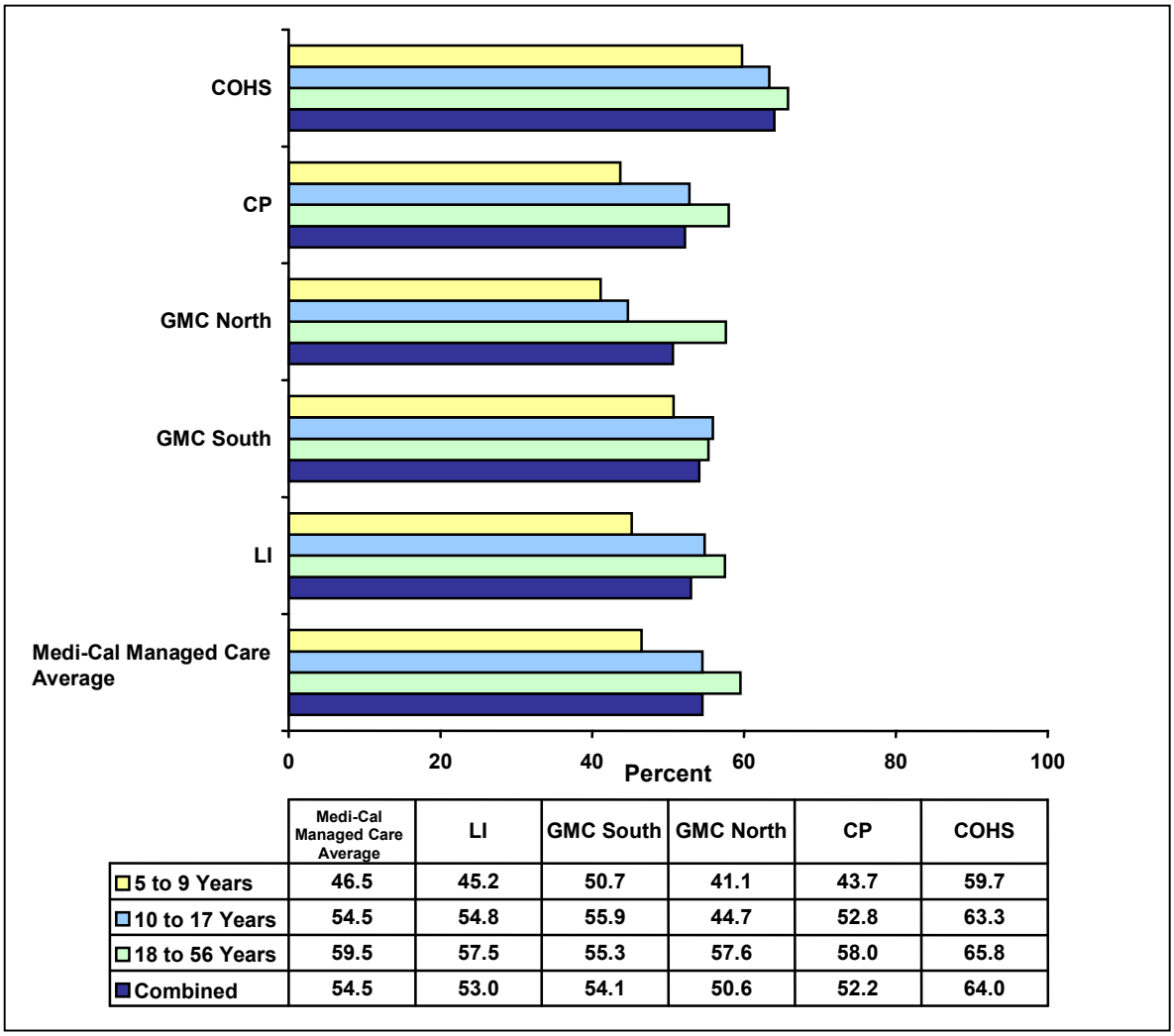
The most surprising result was from the GMC-North. In 2000, the GMC-North region reported a rate of 51.0 percent, or three percentage points above the NCQA 2000 national Medicaid average. In 2001, the GMC-North region had a decline from 51.0 percent to 41.3 percent, or 9.7 percentage points. One plan in the GMC-North had a statistically significant decline of more than 50 percent. The reason for this decline was discussed in the Medi-Cal Managed Care Plan Results section on page 13 of this report.

The GMC-South region had the largest rate increase, increasing from 35.1 percent in 2000 to 43.2 percent in 2001. This 8.1 percentage point gain for the GMC-South represented a 23.1 percent increase. Since this was the second year of HEDIS reporting for the GMC-South plans, the increase in their rate may be attributed to improved data collection.

Use of Appropriate Medications for People with Asthma

Use of Appropriate Medications for People with Asthma was a new measure for the Medi-Cal managed care plans in 2001. Nevertheless, the health plans performed exceptionally well, as illustrated below. (Please see Medi-Cal Managed Care Plan Results beginning on page 13.)

Figure 12. Use of Appropriate Medications for People with Asthma, by Managed Care Model Type



	Medi-Cal Managed Care Average	LI	GMC South	GMC North	CP	COHS
5 to 9 Years	46.5	45.2	50.7	41.1	43.7	59.7
10 to 17 Years	54.5	54.8	55.9	44.7	52.8	63.3
18 to 56 Years	59.5	57.5	55.3	57.6	58.0	65.8
Combined	54.5	53.0	54.1	50.6	52.2	64.0

The overall combined rate for the COHS (64.0 percent) was less than one percentage point below the NCQA 2000 national Medicaid 90th percentile of 64.9 percent. The COHS consistently reported higher rates than the other managed care model types in all three age groups and the overall combined rate. By contrast, the GMC-North region usually reported the lowest rates. Across all managed care plans, the lowest rates were seen for members five to nine years of age, while the highest rates were for those members in the oldest age group.

All of the managed care model types were above the NCQA 2000 national Medicaid 25th percentile of 44.9 percent. In addition, the NCQA 2000 national Medicaid average of 50.4 percent for the combined rate was exceeded by all managed care model types.

Appendix G

Caveats and Limitations

Caveats and Limitations

Common issues identified throughout the audit process are presented here for consideration when interpreting the HEDIS results for the Medi-Cal managed care plans. Some of the issues presented in Table 34, below, have been resolved, while other issues are ongoing or new for the HEDIS 2001 reporting year and are so designated in the following table.

Table 34. Summary of Common NCQA HEDIS Compliance Audit™ Issues for Medi-Cal Managed Care Plans

HEDIS Year	Audit Issue	Impact On HEDIS Reporting
2001	Changes to Measures Related to Maternity Care*	Managed care plans experienced difficulty in acquiring the correct version of the HEDIS 2001 Technical Specifications for Prenatal and Postpartum Care. The programming for this measure was challenging and some plans submitted several revisions before source code was approved.
2001	Utilizing a Software Vendor Undergoing Certification by NCQA*	Several plans contracted with a software vendor undergoing the software certification process by NCQA. Managed care plans and vendors experienced confusion regarding the roles of the respective entities and the scope of the audit in regard to evaluating measure creation. The measure level certification process was also somewhat delayed, which affected plans that needed to pull their samples for hybrid measures early in the data collection season.
2001	Medical Record Pursuit*	Managed care plans experienced difficulties in identifying the correct provider type to pursue, not pursuing records with only a partial administrative hit, and obtaining the medical records from providers.
2001	Reporting the Asthma Measure*	The Asthma measure was a new measure for most Medi-Cal managed care plans this year. The auditors observed difficulties in writing source code, challenges with manipulating pharmacy data and determining the correct dispensing unit, and difficulty in identifying the eligible denominator cases with incomplete encounter data.
2000 2001	Using Internally Built Databases	Several plans have looked to internally built databases to supplement their HEDIS data collection efforts. Managed care plans have proposed to use prenatal care databases, immunization databases, or other databases built for quality improvement purposes. NCQA allows the use of internally built databases to supplement administrative data, provided that the database is validated by the health plan and consistent processes are in place for updating and maintaining the database.
2001	DST	Several plans experienced a delay in receiving their DST from NCQA. In addition, a new Web-based validation and submission process was implemented by NCQA in 2001. NCQA experienced difficulties and delays in having the process available to all plans and plans did not always receive clear instructions on how to complete the validation/submission process. At submission time, the validation report frequently took several hours to be completed and available to the plan due to the high volume of health plans submitting data.

HEDIS Year	Audit Issue	Impact On HEDIS Reporting
2001	Retro-Eligible Members*	The HEDIS 2001 Technical Specifications included a new method of reporting HEDIS measures for members with retroactive enrollment segments. If a managed care plan was able to capture the retroactive period, this could be treated as a gap in enrollment. Since retroactive enrollments are particularly troublesome for the COHS health plans, most of the COHS health plans elected to implement the new method. A few of the other non-COHS Medi-Cal managed care plans implemented, or were capable of implementing, the new method.
1999 2000 2001	Policies and Procedures	Many of the processes used to collect and report HEDIS data were not documented, nor was a formal policy and procedure in place. Auditors evaluate health plans on a documentation trail of evidence to assess compliance with NCQA Standards.
1999 2000 2001	HEDIS Team at the Health Plan	The audit process discovered the following common issues: ♦ Staff inexperienced with HEDIS due to turnover of experienced staff ♦ Lack of resources necessary to adequately complete all required tasks ♦ Lack of communication between information systems (IS) staff and QI coordinators ♦ Lack of oversight of vendors used to collect and report HEDIS data
1999 2000 2001	Provider Data	A common practice among managed care plans was maintaining two separate provider databases; one for credentialing and one for provider data, requiring double data entry. The databases were not compared to one another for accuracy, and validation of provider data entry was seldom performed. These practices potentially cause a health plan to be out of compliance with NCQA Standards for provider data.
1999 2000 2001	Difficulty Tracking Members Across Payers	Some Medi-Cal managed care plans did not track members who were enrolled through different payers (Commercial, Medicaid, Healthy Families, or Medicare) at different times during the reporting year. HEDIS 2001 Technical Specifications state that members who change payers are continuously enrolled and are reported in the payer group to which they belonged at the end of the continuous enrollment period. Health plans that did not track these members were out of compliance with technical specifications.
1999 2000 2001	Well-Child Visits in the First 15 Months of Life	Within the Medi-Cal managed care program, newborns are usually covered under their mothers' health plan membership identification number for the first two months of life. Many managed care plans experienced difficulty in linking the first two months of enrollment with the newly established ID once the child was eligible and enrolled in the plan. This caused plans to under-report the denominator.
1999 2000 2001	Encounter Data for Capitated Services	Managed care plans that have a capitated reimbursement arrangement with providers commonly identify encounter data completeness as an issue. On average, plans estimate that they receive approximately 50 percent of their estimated encounter submissions. This issue affects a plan's capability of reporting any rates administratively and forces the plan to rely heavily on medical record review to report hybrid measures. Under the NCQA IS Standards, managed care plans are expected to monitor data completeness and make attempts at improvement. In 2001, the audit process found that most managed care health plans were compliant with the standard.

HEDIS Year	Audit Issue	Impact On HEDIS Reporting
1999 2000 2001	Obstetrical (OB) Global Billing Practices	OB Global billing occurs when a provider submits one bill that encompasses all services rendered throughout the pregnancy, including postpartum visits. Global billing processes may cause the following: ♦ Difficulty determining the date of delivery. ♦ Difficulty determining when and what services were provided for the member. ♦ Difficulty in determining which maternity measure(s) the member is eligible for due to continuous enrollment criteria. The end result is increased reliance on medical record review.
1999 2000 2001	Live Births	In general, managed care plans encountered difficulty in identifying their live births during the review year due to incompleteness of encounter data submission and, in some cases, members' self referral to OB providers. Some plans were able to overcome this difficulty by relying on utilization review data to confirm live births.
1999 2000	PM-160 Data**	The PM-160 form is a data submission form developed for the documentation of preventive pediatric services rendered by Child Health and Disability Prevention providers. When processing PM-160 forms, managed care plans frequently captured only the diagnosis and procedure codes of services rendered, rather than capturing the individual components of a visit (e.g., history/physical, anticipatory guidance/health education). Claims processors were instructed to automatically prefill the diagnosis code with a V20.2 (routine infant and child health check) if the PM-160 was submitted without a diagnosis code, regardless of the services rendered during the visit. By using the V20.2 code as a "catch-all" for any service rendered—such as a single immunization—plans were unable to utilize their PM-160 data, unless all components of services rendered were captured. Plans, therefore, had to rely more heavily on medical record review. State of California Child Health and Disability Prevention (CHDP) providers also used V20.2 for any service provided, including a single immunization, for any age group.
1999	Use of Dummy Codes or Secondary Diagnosis Codes**	During claims/encounter processing, it was a somewhat common practice to use a dummy code if a diagnosis code was not included on a claim form or a diagnosis code was not accepted by the health plan's claims-processing system. Occasionally, the dummy code used was a valid code, making tracking of the issue impossible. Data completeness and accuracy are compromised by this practice; and, in terms of HEDIS reporting capabilities, measures that rely on a medical event marker or diagnosis to determine the eligible denominator population are affected. Another practice was to substitute the secondary diagnosis code if the primary code was not accepted. HEDIS measures that require a diagnosis to be primary in order to qualify for the denominator are compromised by this practice.

HEDIS Year	Audit Issue	Impact On HEDIS Reporting
1999 2000 2001	Medical Record Review Processes	Internal processes for development of medical record review tools, inter-rater reliability, combining administrative data with medical record review and retrieving records for the over-read process were found to be in need of improvement. Interpretation of HEDIS technical specifications and the hybrid methodology varied across health plans, resulting in critical errors.
1999 2000 2001	Source Code Challenges	The following issues were found to be common among Medi-Cal managed care plans: ♦ Using outdated HEDIS technical specifications. ♦ Not checking the NCQA Web site for updates to HEDIS technical specifications. ♦ Using incorrect code logic. ♦ Not using available data (leaving out a subcontractor's data). ♦ Not checking for reasonableness of counts and rates. ♦ Having poor oversight of source code vendors. ♦ Employing programmers inexperienced with HEDIS.
1999 2000 2001	Oversight of Out-sourced Functions (Vendors)	Oversight of vendors is often inadequate. Some managed care plans are unaware of the practices employed by vendors. Contractual obligations for vendors do not always require submission of data required for HEDIS reporting. These issues may lead to underreporting of claims and encounter data. Important provider information that is missing may require additional medical record pursuit, even for claims that would otherwise be an administrative numerator positive case.

* These Audit Issues were new for 2001.
** These Audit Issues were prevalent in 1999 and/or 2000. Based on 2000 audit findings, these issues have been resolved.

This list of common audit issues is not all-inclusive. Other limitations unrelated to the actual audit exist within the Medi-Cal managed care program. These limitations affect medical record retrieval and the use of administrative data. The most common issues are identified below.

Limitations of Medical Record Retrieval

- Medi-Cal managed care members tend to be a mobile population. Disruption in Medi-Cal managed care eligibility, monthly open enrollment and disenrollment from plans, and members that frequently switch primary care physicians (PCPs) can lead to fragmented medical records. The result is often incomplete or missing medical records rather than a lack of care.
- Services may have been provided in the physician's office, but not documented in the medical record.
- Care may have been rendered outside of the managed care plan's provider network and not recorded at the physician's office (i.e., health fairs, local health departments, schools, and other sites).
- The period of time allotted to health plans and practitioners for medical record retrieval may limit the quality and quantity of data collected.

- The HEDIS 2001 definition of a provided service for some measures (e.g., well-child visits) requires more documentation for medical record review than for administrative data.

The lack of medical record review may indicate: 1) the plan chose not to pursue medical records; 2) the medical record review was biased, so the plan could not use the results obtained from medical record review; or 3) the plan could not locate the medical record or the relevant pieces of the medical record.

Administrative Data Limitations

- Some managed care plans were unable or chose not to use their administrative data due to issues related to data capture and accuracy.
- Providers who are not paid on a fee-for-service basis (e.g., capitated providers) may render services, but may neglect to submit the encounter to the plan.
- The DST was limited in its ability to separate the lack of services provided from lack of documented care (i.e., missing medical records).
- Incorrect administrative provider files or the inability to link sample cases with their appropriate providers may have precluded the location of the required medical record documentation.

The lack of administrative data may indicate: 1) the managed care plan chose to perform 100 percent medical record review; 2) the plan was unable to perform a system integration with medical record review; or 3) the plan's administrative data were incomplete and would have produced a biased result.

Glossary of Terms

Glossary of Terms

Administrative Data
Any automated data within a managed care plan (e.g., claims/encounter data, member data, provider data, hospital billing data, pharmacy data and laboratory data).

Administrative Method
The administrative method requires plans to identify the eligible population (i.e., the denominator) using the administrative data. The numerators, or services provided to the members who are in the eligible population, are also solely derived from the administrative data. The administrative method uses the entire eligible population and does not allow for sampling. In addition, medical records cannot be used to retrieve information. Example: A managed care plan has 10,000 members who qualify for the *Postpartum Care* measure. The plan chooses to perform the administrative method and finds that 4,000 members out of the 10,000 (or 40.0 percent) had a postpartum visit using the administrative data. The administrative method is cost efficient, but can produce lower rates due to incomplete data submission by capitated providers.

Bias
A deviation of the results from the truth (e.g., rates that are substantially biased do not represent the eligible population and, therefore, inferences about the population cannot be made).

Capitation
A method of payment for providers. Under a capitated payment arrangement, providers are reimbursed on a per member/per month basis. The provider receives payment each month, regardless of whether the member needed services or not. Therefore, there is little incentive for providers to submit individual encounters, knowing that payment is not dependent on such submission.

DHS External Accountability Set
A set of eight performance measures representing the areas of clinical quality that are appropriate to the Medi-Cal Managed Care population. In 2001, all eight DHS External Accountability Set measures were HEDIS measures. Three of these measures (i.e., *Childhood Immunization Status*, *Use of Appropriate Medications for People with Asthma*, and *Eye Exams for People with Diabetes*) evaluate effectiveness of care provided to members enrolled in the Medi-Cal Managed Care Plans. *Timeliness of Prenatal Care* and *Postpartum Care* assess whether or not care is provided to members in a timely manner. *Well-Child Visits* and *Adolescent Well-Care Visits* assess the percentage of members who are receiving recommended services. A more detailed explanation can be found in the Overview section of this report (See page 5).

Encounter Data
Billing data received from a capitated provider. Although the managed care plan does not reimburse the provider for each individual encounter, submission of the encounter data to the plan allows the plan to collect the data for future HEDIS reporting.

High Performance Level (HPL)
The HPL is set by DHS and is defined as the NCQA 2000 national Medicaid 90th percentile for each measure. If the 90th percentile was not available, then the Medi-Cal managed care average plus one standard deviation was used.

Hybrid Method
The hybrid method requires health plans to identify the eligible population using the administrative data, and then perform a systematic sample to obtain 411 cases. The 411 members become the denominator. The administrative data is then used to identify services provided to those 411 members. Medical records must then be reviewed for those members who do not show a service using the administrative data. Example: a managed care plan has 10,000 members who qualify for the *Postpartum Care* measure. The plan chooses to perform the hybrid method. After selecting 411 eligible members, the managed care plan finds that 161 members had a postpartum visit using the administrative data. The plan then obtains medical records for the 250 members who did not have a postpartum visit. Of those 250 members, 54 were found to have a postpartum visit recorded in the medical record. Therefore, the final rate is (161 + 54)/411, or approximately 50 percent. The hybrid method generally produces higher results, but is considerably more labor intensive.

Inter-Rater Reliability
For the purposes of this report, the inter-rater reliability was a measurement of the agreement rate between the audit firm's abstraction and the Medi-Cal managed care plan's abstraction of the medical record data.

Member Data
Electronic health plan files containing information about members, such as name, date of birth, gender, current address and enrollment (i.e., when the member joined the managed care plan).

Minimum Performance Level (MPL)
The MPL is set by DHS and is defined as the NCQA 2000 national Medicaid 25th percentile for each measure. If the 25th percentile was not available, then the Medi-Cal managed care average minus one standard deviation was used.

Performance Measures
The eight HEDIS measures in the DHS External Accountability Set Every Medi-Cal managed care plan in operation for over one year was required to report rates for these HEDIS measures. A more detailed explanation of the DHS External Accountability Set, can be found tin the Overview section of the report (See page 5).

Provider Data
Electronic files containing information about physicians, such as type of physician, specialty, reimbursement arrangement, and office location.

Source Code
The written computer programming logic that determines eligible population, denominators, and numerators and that is used to calculate the rates.

Software Vendor
A third party that contracts with a managed care plan solely to write source code and calculate the HEDIS rates.

Systematic Sampling Routine
The procedure required by NCQA for selecting the sample cases from the eligible member population. This is performed by alphabetically sorting the eligible members for each measure and then selecting members from the list at specific intervals, such as every seventh member on the list.

Vendor
Any third party that contracts with a managed care plan to perform services. The most common delegated services are: pharmacy vendors, vision care services, laboratory services, claims processing, HEDIS® software vendors and provider credentialing.